

Theresa Schultz
March 04, 2020

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UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF TEXAS
McALLEN DIVISION

ROBERT "BOBBY" FLORES, §
 §
Plaintiff, §
 §
vs. § Civil Action No.
 § 7:18-CV-00027
HONEYWELL SAFETY PRODUCTS, §
USA, INC., §
 §
Defendant. §

VIDEOTAPED DEPOSITION

THERESA SCHULTZ

MARCH 4, 2020

VIDEOTAPED DEPOSITION OF THERESA SCHULTZ,
produced as a witness at the instance of the
Plaintiff and duly sworn, was taken in the
above-styled and numbered cause on March 4, 2020,
from 2:00 p.m. to 6:38 p.m., before Kara Dickinson,
reported by computerized stenotype machine at the
offices of Royston, Rayzor, Vickery & Williams, LLP,
8200 West IH-10, Suite 320, San Antonio, Texas 78230,
under Rules 30(b)(2)(A) of the Federal Rules of Civil
Procedure and the provisions stated on the record or
attached hereto.

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1	A P P E A R A N C E S	1	EXHIBITS
2		2	Page
3	FOR THE PLAINTIFF	3	Exhibit 19 - Bill Murphy Article 75
4	LAW OFFICE OF EZEQUIEL REYNA, JR., L.L.P.	4	Exhibit 20 - 2009 NIOSH Alert 81
5	Edward L. Ciccone	5	Exhibit 21 - January 2010 NIOSH publication 86
6	702 W. Expressway 83, Suite 100	6	Exhibit 22 - Position Paper on Recreational
7	Weslaco, Texas 78596	7	Firearms Noise 101
8	956-968-9556	8	Exhibit 23A - Abstract 103
9	elciccone@gmail.com	9	Exhibit 23B - ISHN Article 154
10	FOR THE DEFENDANT	10	Exhibit 24 - January 2014 Scott Lake Article 184
11	ROYSTON, RAYZOR, VICKERY & WILLIAMS, L.L.P.	11	Exhibit 25 - (Exhibit No. skipped)
12	Javier Gonzalez	12	Exhibit 26 - Hearing Conservation Manual
13	55 Cove Circle	13	5th Edition 204
14	P.O. Box 3509	14	Exhibit 27 - List of Exhibits 204
15	956-542-4377	15	
16	javier.gonzalez@roystonlaw.com	16	
17	MIRANDA, SAMBURSKY, SLONE, SKLARIN, VERVENIOTIS,	17	
18	L.L.P.	18	Reporter's Certification 209
19	Neil L. Sambursky	19	
20	240 Mineola Boulevard	20	
21	Mineola, NY 11501	21	
22	(516) 408-5408	22	
23	nsambursky@pmtlawfirm.com	23	
24	ALSO PRESENT: Videographer	24	
25		25	

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1	EXAMINATION INDEX	1	PROCEEDINGS
2	THERESA SCHULTZ	2	THE VIDEOGRAPHER: Today's date is
3	Examination by Mr. Ciccone	3	March 4th, 2020. The time now is 2:10 p.m. We are
4	Examination by Mr. Gonzalez	4	on the record.
5	Examination by Mr. Ciccone	5	THERESA SCHULTZ,
6	EXHIBITS	6	having been first duly sworn, testified as follows:
7	Exhibit 1 - Howard Leight Logo	7	EXAMINATION
8	Exhibit 2 - Chapter 13 Hearing Conservation Manual	8	Q. (BY MR. CICCONE) Ma'am, would you state
9	Exhibit 3 - Video of Ms. Schultz	9	your name for us, please.
10	Exhibit 4 - Video of Ms. Schultz	10	A. My name is Theresa Wise Schultz.
11	Exhibit 5 - 2010 Sperian PowerPoint	11	Q. And I understand that you're a retired Air
12	Exhibit 6 - 2013 Ms. Schultz Paper	12	Force officer?
13	Exhibit 7 - USA Shooting Team Webpage	13	A. Yes, I am.
14	Exhibit 8 - National Shooting Sports Foundation	14	Q. And during this deposition, may I show you
15	Safety Video	15	the respect that I think that you've earned by
16	Exhibit 9 - Photos of Box of Shooters Earplugs	16	addressing you by your rank?
17	Exhibit 10 - Photos of Box of MAXX Earplugs	17	A. You may. I haven't had that in a while, so
18	Exhibit 11 - Photos of Tub of Shooters Earplugs	18	I enjoy it.
19	Exhibit 12 - Michael & Associates 2003 Report	19	Q. Very well, Colonel. Colonel, are you from
20	Exhibit 13 - 2015 Ms. Schultz ISHN Paper	20	Texas?
21	Exhibit 14 - (Video not played - not attached)	21	A. I am.
22	Exhibit 15 - Proposed EPA Rule Change	22	Q. And tell me where in Texas that you were
23	Exhibit 16 - EPA Webpage	23	born?
24	Exhibit 17 - 2018 Affidavit and Report	24	A. I was born in Jacinto City, Texas.
25	Exhibit 18 - NHCA Publication	25	Q. And did you go to high school in Texas?

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Page 6	Page 8
1 A. I did.	1 during that time.
2 Q. And tell me what year you graduated?	2 A. Fort Riley, Kansas.
3 A. 1976.	3 Q. And tell me what your responsibilities were
4 Q. And do you have a bachelor in science in	4 during the three years that you were in the Army?
5 communications disorders from the University of Texas	5 A. As an audiologist in the Army, we split our
6 at Austin?	6 time between clinical work doing diagnostic hearing
7 A. I do.	7 evaluations and hearing aid fittings and hearing
8 Q. And when did you get that BS?	8 conservation work preventing noise induced hearing
9 A. 1981.	9 loss in the troops that we're responsible for.
10 Q. And do you have also have a master's in	10 Q. And you then went into the Air Force?
11 audiology from the University of Texas?	11 A. Yes.
12 A. 1983, yes.	12 Q. And you served in the Air Force for 18
13 Q. Okay. And then you got a PhD in hearing	13 years?
14 science from Ohio State?	14 A. That's correct.
15 A. The Ohio State University.	15 Q. And you retired from the Air Force in 2004?
16 Q. The Ohio State University. And tell me	16 A. That's correct.
17 when you got your PhD.	17 Q. And, Colonel, while you were in the Air
18 A. 1995.	18 Force were you twice recognized as outstanding
19 Q. What was the title of your dissertation?	19 audiologist of the year?
20 A. Oh, boy, title, title?	20 A. I was.
21 Q. What was the dissertation about?	21 Q. And how many audiologists does the Air
22 A. It was basically looking at standard	22 Force have?
23 threshold shift definitions and comparing them in	23 A. It changes over time, anywhere between 30
24 military hearing conservation data analytics.	24 and 45.
25 Q. And, Colonel, when you wrote that	25 Q. And so out of those 30 or 45 audiologists,
Page 7	Page 9
1 dissertation, were you already in the military?	1 the Air Force recognized you as the No. 1 audiologist
2 A. I was.	2 two years in a row?
3 Q. And did the Army, I think you were in the	3 A. Not in a row.
4 Army initially, did the Army send you to get that	4 Q. And tell me did you receive an award that's
5 dissertation or pay for your education in that	5 known as the Elizabeth Guild Award for Contributions
6 regard?	6 to Military Hearing Conservation?
7 A. I was in the Air Force at the time, and	7 A. I did.
8 they did pay for my education.	8 Q. And what year did you receive that award?
9 Q. Colonel, tell me what got you interested in	9 A. It's on my wall. I should know that. As a
10 audiology.	10 matter of fact, I really don't remember the year.
11 A. I was going to school at the University of	11 Q. Well, certainly before 2004?
12 Texas as a music major and realized that music was	12 A. It was.
13 not for me. And so my sister was actually working at	13 Q. Okay. Now, Colonel, you used a term while
14 The School for the Deaf in Austin and I became	14 you were discussing your Army career, and that term
15 interested in sign language. So I took a basic	15 was "noise induced hearing loss". Okay. And I want
16 communications disorders class where they talked	16 you to define that term for us in terms that,
17 about deaf education and speech pathology and	17 perhaps, laypeople like us can understand. Can you
18 audiology. And when they talked about audiology, it	18 define it for us, please.
19 sort of sparked some interest, and went into it from	19 A. Define noise induced hearing loss. It's a
20 there.	20 hearing loss that is caused due to hazardous levels
21 Q. And I understand that you began your career	21 of noise.
22 in hearing conservation as it an audiologist for the	22 Q. Okay. And does noise induced hearing loss,
23 U.S. Army?	23 what part of the hearing organ does this damage
24 A. I did. I was in the Army for three years.	24 affect?
25 Q. Okay. And tell me where you were stationed	25 A. Generally, it affects structures in the

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10 to 13

<p style="text-align: right;">Page 10</p> <p>1 inner ear.</p> <p>2 Q. And this would be the cochlea?</p> <p>3 A. That's correct.</p> <p>4 Q. And the little hairs in side the cochlea?</p> <p>5 A. Little cells with hairs on top of them,</p> <p>6 yes, sir.</p> <p>7 Q. And these can be permanently damaged by</p> <p>8 excessive noise?</p> <p>9 A. They can be.</p> <p>10 Q. Okay. And, Colonel, with respect to</p> <p>11 military personnel, is noise induced hearing loss an</p> <p>12 occupational hazard to those personnel?</p> <p>13 A. I'm sorry. Say the first part of the</p> <p>14 sentence again.</p> <p>15 Q. With respect to Army personnel, military</p> <p>16 personnel in general, is noise induced hearing loss</p> <p>17 an occupational hazard for those people?</p> <p>18 A. It is.</p> <p>19 Q. And in terms of the scale of the problem,</p> <p>20 can you describe that for us, please.</p> <p>21 MR. GONZALEZ: Objection form.</p> <p>22 Q. (BY MR. CICCONE) Is it a -- is it a -- You</p> <p>23 can answer the question if you understood it.</p> <p>24 A. Yes. Say it again.</p> <p>25 Q. Is it a problem that you consider to be a</p>	<p style="text-align: right;">Page 12</p> <p>1 service and filed for compensation.</p> <p>2 Q. And you do you have any idea approximately</p> <p>3 how much money the government pays to veterans who</p> <p>4 have experienced noise induced hearing loss as a</p> <p>5 result of their military experience each year?</p> <p>6 MR. GONZALEZ: Object to the form.</p> <p>7 THE WITNESS: I don't know the number</p> <p>8 off the top of my head.</p> <p>9 Q. (BY MR. CICCONE) Is it in the hundreds of</p> <p>10 millions?</p> <p>11 MR. GONZALEZ: Object to form.</p> <p>12 THE WITNESS: I would say to find that</p> <p>13 information -- I'd need to look it up.</p> <p>14 Q. (BY MR. CICCONE) Very well. Now, Colonel,</p> <p>15 after you retired from the Air Force in 2004, did you</p> <p>16 work for a company called Sonomax?</p> <p>17 A. I did.</p> <p>18 Q. Okay. And tell me what kind of a business</p> <p>19 Sonomax is.</p> <p>20 A. It was a startup company that had a fairly</p> <p>21 novel custom hearing protector that could be filtered</p> <p>22 to provide a target amount of hearing protection.</p> <p>23 Q. Where is that company located?</p> <p>24 A. Montreal, Canada.</p> <p>25 Q. And were you the vice president of</p>
<p style="text-align: right;">Page 11</p> <p>1 serious problem?</p> <p>2 MR. GONZALEZ: Object to form.</p> <p>3 You can still answer.</p> <p>4 THE WITNESS: I don't know that my</p> <p>5 opinion on it is all that important. But, yes,</p> <p>6 people do get noise induced hearing loss in the</p> <p>7 military, and it is recognized.</p> <p>8 Q. (BY MR. CICCONE) Does it affect a</p> <p>9 significant number of people in your opinion?</p> <p>10 MR. GONZALEZ: Object to form.</p> <p>11 THE WITNESS: Again, define</p> <p>12 "significant".</p> <p>13 Q. (BY MR. CICCONE) Well, in terms of</p> <p>14 percentage, do you have any idea of the percentage of</p> <p>15 military people who experience a noise induced</p> <p>16 hearing loss in connection with their military</p> <p>17 service?</p> <p>18 A. It changes, that percentage changes over</p> <p>19 time and from services to service and -- It varies.</p> <p>20 Q. Does the government pay money to veterans</p> <p>21 who have experienced noise induced hearing loss as a</p> <p>22 result of their military service?</p> <p>23 A. There is a process in the Veterans</p> <p>24 Administration for people who have been received</p> <p>25 hearing loss and think that it's from their military</p>	<p style="text-align: right;">Page 13</p> <p>1 professional operations?</p> <p>2 A. Yes.</p> <p>3 Q. And what were your responsibilities with</p> <p>4 that company?</p> <p>5 A. To recruit and train people to be able to</p> <p>6 make these custom hearing protectors.</p> <p>7 Q. And you worked there in Montreal, or did</p> <p>8 you work somewhere else?</p> <p>9 A. I worked in the United States.</p> <p>10 Q. And how long did you work for Sonomax?</p> <p>11 A. About eight months.</p> <p>12 Q. Okay. And after Sonomax, did you go to</p> <p>13 work for NIOSH?</p> <p>14 A. Yes.</p> <p>15 Q. Okay. And have I pronounced that</p> <p>16 correctly, NIOSH?</p> <p>17 A. The National Institute for Occupational</p> <p>18 Safety and Health.</p> <p>19 Q. And that's a federal agency?</p> <p>20 A. It is.</p> <p>21 Q. And, Colonel, is that part of the Center</p> <p>22 for Disease Control and Prevention?</p> <p>23 A. Yes.</p> <p>24 Q. And does NIOSH work in tandem with OSHA?</p> <p>25 A. They do. They are different agencies.</p>

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14 to 17

<p style="text-align: right;">Page 14</p> <p>1 NIOSH does research and makes recommendations about</p> <p>2 safety practices, and of course OSHA is under a</p> <p>3 different part of the federal government, but they</p> <p>4 are more the regulatory branch.</p> <p>5 Q. Okay. And tell me whether or not NIOSH</p> <p>6 provides any sort of leadership to prevent workplace</p> <p>7 illnesses and injuries?</p> <p>8 A. Yes, they do. That is their mission.</p> <p>9 Q. Right. And at NIOSH were you a team leader</p> <p>10 for hearing loss prevention?</p> <p>11 A. Yes, sir, I was.</p> <p>12 Q. And, Colonel, tell me what your</p> <p>13 responsibilities were as a team leader at NIOSH.</p> <p>14 A. The NIOSH lab where I worked focused on</p> <p>15 mining safety. And so we did research and made best</p> <p>16 practice recommendations for hearing loss prevention</p> <p>17 in the mining industry.</p> <p>18 Q. And where was your office?</p> <p>19 A. Ins Pittsburgh, Pennsylvania.</p> <p>20 Q. And did you travel around or did you spend</p> <p>21 most of your time there in Pennsylvania?</p> <p>22 A. Most of the time there.</p> <p>23 Q. Okay. So you would have joined NIOSH,</p> <p>24 what, about 2005, 2006?</p> <p>25 A. Yes, sir.</p>	<p style="text-align: right;">Page 16</p> <p>1 while you worked for Sperian; is that correct?</p> <p>2 A. That is correct.</p> <p>3 Q. And so did you then become a Honeywell</p> <p>4 employee?</p> <p>5 A. Yes, sir.</p> <p>6 Q. Even though you still did the same thing</p> <p>7 that, I guess, you were doing before?</p> <p>8 A. Correct.</p> <p>9 Q. Okay. I want to talk to you very briefly</p> <p>10 about this gentleman Howard Leight. Do you know who</p> <p>11 Howard Leight is?</p> <p>12 A. Yes, I have met him.</p> <p>13 Q. Okay. And Howard Leight, he's an inventor,</p> <p>14 a businessman in California. Do you know?</p> <p>15 A. Yes.</p> <p>16 Q. Okay. And do you know approximately how</p> <p>17 old he is? If he's even still alive?</p> <p>18 A. He is still alive, as far as I know, and I</p> <p>19 would guess around 70ish.</p> <p>20 Q. Okay. I think he may be older than that,</p> <p>21 but I'll trust your memory.</p> <p>22 Did you ever meet Howard Leight's</p> <p>23 father, whose name was Charles Leight?</p> <p>24 A. No, I never met him.</p> <p>25 Q. Okay. He died, I think, in 2007 when he</p>
<p style="text-align: right;">Page 15</p> <p>1 Q. And how long did you work for NIOSH?</p> <p>2 A. About two years.</p> <p>3 Q. And then after NIOSH, Colonel, did you go</p> <p>4 to work for Sperian Protection?</p> <p>5 A. Yes.</p> <p>6 Q. And I've seen online, perhaps in a</p> <p>7 biography, that you went to work for them in May of</p> <p>8 2008. Is that about right?</p> <p>9 A. Yes, that's correct.</p> <p>10 Q. Okay. And at that time, Colonel, was</p> <p>11 Sperian still owned by the French company called</p> <p>12 Bacou?</p> <p>13 A. Yes, yes.</p> <p>14 Q. Okay. Have I pronounced that correctly?</p> <p>15 A. Yes, you have.</p> <p>16 Q. Okay. And am I correct that about two</p> <p>17 years after you went to work for Bacou --</p> <p>18 A. Bacou-Daloz is what it was called at the</p> <p>19 time, but yes.</p> <p>20 Q. Right, Bacou-Daloz. Am I correct that</p> <p>21 about two years after you went to work for -- we'll</p> <p>22 just call them Bacou -- that Honeywell purchased</p> <p>23 Sperian?</p> <p>24 A. That's correct.</p> <p>25 Q. Okay. And Honeywell purchased Sperian</p>	<p style="text-align: right;">Page 17</p> <p>1 was 95. Do you know whether Charles Leight and his</p> <p>2 father, Howard, patented --</p> <p>3 A. You mean.</p> <p>4 Q. -- hearing protection devices?</p> <p>5 A. Okay. You mean Howard Leight and his</p> <p>6 father?</p> <p>7 Q. Yeah. The father was named Charles.</p> <p>8 A. Oh, okay.</p> <p>9 Q. Okay.</p> <p>10 A. Okay.</p> <p>11 Q. Do you know if they patented hearing</p> <p>12 protection devices?</p> <p>13 A. Yes.</p> <p>14 Q. Do you know how many they patented over the</p> <p>15 years?</p> <p>16 MR. GONZALEZ: Object to form.</p> <p>17 THE WITNESS: No.</p> <p>18 Q. (BY MR. CICCONE) Okay. I've got patents</p> <p>19 going back to 1954 by Charles Leight, Sr., and as</p> <p>20 late as 2017 by Howard Leight. Are you familiar at</p> <p>21 all with any of the patents that either one of those</p> <p>22 two men have registered?</p> <p>23 MR. GONZALEZ: Object to form.</p> <p>24 THE WITNESS: I'm not sure what you</p> <p>25 mean by "familiar with the patents".</p>

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18 to 21

<p style="text-align: right;">Page 18</p> <p>1 Q. (BY MR. CICCONE) Do you know what they did?</p> <p>2 What kind of inventions they were?</p> <p>3 MR. GONZALEZ: Object to form.</p> <p>4 THE WITNESS: They were hearing</p> <p>5 protectors.</p> <p>6 Q. (BY MR. CICCONE) Do you know if they</p> <p>7 patented hearing -- like earplugs?</p> <p>8 A. Earplugs.</p> <p>9 Q. And other devices as well, as far as you</p> <p>10 know?</p> <p>11 A. Banded hearing protection, yes.</p> <p>12 Q. Okay. And when you were with Sperian,</p> <p>13 where was your office?</p> <p>14 A. I lived in Pittsburgh most of the time that</p> <p>15 I worked for them and then moved to Texas.</p> <p>16 Q. At any point did you ever live in</p> <p>17 California?</p> <p>18 A. I did not.</p> <p>19 Q. Okay. So you worked, sort of, remotely for</p> <p>20 them if their office was there in California?</p> <p>21 A. Yes, sir.</p> <p>22 MR. GONZALEZ: Let him finish his</p> <p>23 question, then he's going to let you finish your</p> <p>24 response. Okay?</p> <p>25 THE WITNESS: Okay.</p>	<p style="text-align: right;">Page 20</p> <p>1 protectors.</p> <p>2 Q. How many different models of earplugs does</p> <p>3 Honeywell make, if you know?</p> <p>4 A. I don't know the number off the top of my</p> <p>5 head, but --</p> <p>6 MR. GONZALEZ: Object to form.</p> <p>7 THE WITNESS: -- several.</p> <p>8 Q. (BY MR. CICCONE) Like more than five?</p> <p>9 A. More than five.</p> <p>10 Q. More than ten?</p> <p>11 A. You want me to make a rough order of</p> <p>12 magnitude guess?</p> <p>13 Q. Well, just --</p> <p>14 MR. GONZALEZ: Objection to form.</p> <p>15 Q. (BY MR. CICCONE) -- give me your best</p> <p>16 estimate, Colonel.</p> <p>17 (Reporter clarification)</p> <p>18 Q. (BY MR. CICCONE) Colonel, give me your best</p> <p>19 estimate of the number of models of hearing --</p> <p>20 earplugs -- earplugs that Honeywell manufactures and</p> <p>21 markets?</p> <p>22 MR. GONZALEZ: Object to form.</p> <p>23 THE WITNESS: So models I would say,</p> <p>24 20.</p> <p>25 Q. (BY MR. CICCONE) And they also manufacture</p>
<p style="text-align: right;">Page 19</p> <p>1 MR. GONZALEZ: You caught him a little</p> <p>2 bit on his question.</p> <p>3 (Exhibit 1 marked)</p> <p>4 Q. (BY MR. CICCONE) Now, Exhibit 1 is a --</p> <p>5 what I think is the Howard Leight logo. Have you</p> <p>6 ever seen that logo before?</p> <p>7 A. Yes, sir.</p> <p>8 Q. Okay. And do you -- do you know if the</p> <p>9 person depicted in this logo is supposed to be Howard</p> <p>10 Leight?</p> <p>11 A. I don't really know if it is or not.</p> <p>12 Q. Okay. But you've seen the logo before?</p> <p>13 A. I have.</p> <p>14 Q. And does it appear on various Honeywell</p> <p>15 hearing protection products, as far as you know?</p> <p>16 A. Yes.</p> <p>17 Q. And are you familiar at all with any of the</p> <p>18 Honeywell product line, for example, earplugs?</p> <p>19 A. Yes.</p> <p>20 Q. Okay. And how did you became familiar with</p> <p>21 the product line?</p> <p>22 A. As an employee of Howard</p> <p>23 Leight/Sperian/Honeywell one of my jobs was to be</p> <p>24 familiar with our product line and teach people about</p> <p>25 hearing conservation and the use of hearing</p>	<p style="text-align: right;">Page 21</p> <p>1 and market what we call earmuffs?</p> <p>2 A. Yes.</p> <p>3 Q. Are you familiar at all with that product</p> <p>4 line?</p> <p>5 A. Yes, sir.</p> <p>6 Q. And we'll talk a little bit more about that</p> <p>7 in a while. But do you have any estimate of the</p> <p>8 number of different models of earmuffs that Honeywell</p> <p>9 manufactures and markets?</p> <p>10 MR. GONZALEZ: Object to form.</p> <p>11 THE WITNESS: Both of the answers</p> <p>12 change over time because the number of products</p> <p>13 change over time. But again, a rough order of</p> <p>14 magnitude for earmuffs would be maybe eight to ten</p> <p>15 different kind.</p> <p>16 Q. Okay. And tell me a little bit about</p> <p>17 Honeywell. Is Honeywell a publically traded company,</p> <p>18 as far as you know?</p> <p>19 A. Yes, sir.</p> <p>20 Q. And is the parent company Honeywell</p> <p>21 International?</p> <p>22 MR. GONZALEZ: Object.</p> <p>23 THE WITNESS: Yes.</p> <p>24 Q. (BY MR. CICCONE) And as far as you know,</p> <p>25 does that company conduct its business through a</p>

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22 to 25

<p style="text-align: right;">Page 22</p> <p>1 number of different subsidiaries?</p> <p>2 MR. GONZALEZ: Object to form.</p> <p>3 THE WITNESS: I'm not sure I'm the</p> <p>4 right source for their business model. But yes, they</p> <p>5 do have divisions, yes.</p> <p>6 Q. (BY MR. CICCONE) Right. And I'm interested</p> <p>7 in knowing whether you worked for the division that's</p> <p>8 known as Honeywell Safety Products?</p> <p>9 A. It was known by that name at one point in</p> <p>10 time. The name changes as time changes.</p> <p>11 Q. Right. And tell me, does that division,</p> <p>12 did it sell personnel protection equipment, including</p> <p>13 things like fall protection devices, eye protection,</p> <p>14 respirators, and hearing protectors?</p> <p>15 A. Yes, sir.</p> <p>16 Q. Okay. But you just worked with respect to</p> <p>17 the hearing protection facet of that business, am I</p> <p>18 right or wrong?</p> <p>19 A. Yes, sir. For eight of -- eight and a half</p> <p>20 of the eleven years that I worked there, I only</p> <p>21 worked for the hearing protection part.</p> <p>22 Q. And, of course, that was your background,</p> <p>23 that was your specialty?</p> <p>24 A. Yes, sir.</p> <p>25 Q. Right. And tell me what your job</p>	<p style="text-align: right;">Page 24</p> <p>1 A. That was not within my job description.</p> <p>2 Q. Do you know who the people at Honeywell are</p> <p>3 who are responsible for the product labeling with</p> <p>4 respect to hearing protectors?</p> <p>5 A. Yes, sir.</p> <p>6 Q. Can you name any names?</p> <p>7 A. It's changed over time.</p> <p>8 Q. Well, say, while you were there.</p> <p>9 A. It changed while I was there.</p> <p>10 Q. Say, at the end of your tenure at</p> <p>11 Honeywell, can you name any of the people responsible</p> <p>12 for labeling of the hearing protecting products?</p> <p>13 A. I would say the global product manager for</p> <p>14 hearing was Charlotte Loomis.</p> <p>15 Q. And where was Charlotte located?</p> <p>16 A. In San Diego.</p> <p>17 Q. Did you ever meet her face-to-face?</p> <p>18 A. Yes.</p> <p>19 Q. Did you meet her face-to-face more than</p> <p>20 once?</p> <p>21 A. Yes.</p> <p>22 Q. Did you ever work with her?</p> <p>23 A. Yes.</p> <p>24 Q. And work did you do with her?</p> <p>25 A. She would review documents that we were</p>
<p style="text-align: right;">Page 23</p> <p>1 description was during this 11 years that you worked</p> <p>2 for Honeywell.</p> <p>3 A. My job description for the majority of that</p> <p>4 time was hearing conservation manager, and -- so the</p> <p>5 job description basically was to educate our</p> <p>6 customers about hearing loss prevention, hearing</p> <p>7 conservation, and best practices in those aspects.</p> <p>8 Q. Did you do this by yourself, or were there</p> <p>9 other people at Honeywell that worked with you to do</p> <p>10 that?</p> <p>11 A. We had a team of audiologists and marketing</p> <p>12 managers and other folks that worked on that, yes,</p> <p>13 sir.</p> <p>14 Q. And, Colonel, did you work with anybody at</p> <p>15 Honeywell with respect to designing the products that</p> <p>16 Honeywell was marketing for hearing protection?</p> <p>17 A. No, that was not within my scope.</p> <p>18 Q. Did you work with anybody with respect to</p> <p>19 testing the hearing protectors that company was</p> <p>20 marketing during the time that you worked there?</p> <p>21 A. That was not my job description either.</p> <p>22 Q. Did you -- did you work with anyone at</p> <p>23 Honeywell with respect to the labeling of the</p> <p>24 products that Honeywell was marketing during the</p> <p>25 period of time that you worked there?</p>	<p style="text-align: right;">Page 25</p> <p>1 working on together. We were a hearing conservation</p> <p>2 team, so we -- several of us worked together to</p> <p>3 review things that we wrote online, those sorts of</p> <p>4 things.</p> <p>5 Q. What specific information would you provide</p> <p>6 Charlotte to review?</p> <p>7 A. Often if we were writing an article for a</p> <p>8 trade journal, Charlotte would be one of the people</p> <p>9 who reviewed it, yes.</p> <p>10 Q. And what purpose would it serve her to</p> <p>11 review your work?</p> <p>12 A. Another set of eyes.</p> <p>13 Q. Colonel, when did you leave Honeywell?</p> <p>14 A. In May of 2019.</p> <p>15 Q. Can I ask you the reason that you left?</p> <p>16 A. You can.</p> <p>17 Q. Why did you leave?</p> <p>18 A. There were several reasons. The primary</p> <p>19 reason was that Honeywell is a larger entity, had a</p> <p>20 more strict work from home policy, and that just</p> <p>21 didn't meet my ongoing needs.</p> <p>22 Q. And when you left in 2009, were you living</p> <p>23 in San Antonio or somewhere else?</p> <p>24 A. 2019.</p> <p>25 Q. 2019. I'm sorry.</p>

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<p style="text-align: right;">Page 26</p> <p>1 A. No. I lived in College Station, Texas.</p> <p>2 Q. And so there strict working from home</p> <p>3 policy was at odds with what your priorities were at</p> <p>4 the time?</p> <p>5 A. Correct.</p> <p>6 Q. Okay. What are some of the other reasons</p> <p>7 that you left?</p> <p>8 MR. GONZALEZ: Object to form.</p> <p>9 THE WITNESS: One reason was I had</p> <p>10 always wanted to work at the Department of Defense</p> <p>11 Hearing Center of Excellence, and a position became</p> <p>12 available that I wanted to apply for.</p> <p>13 Q. (BY MR. CICCONE) And, Colonel, tell me</p> <p>14 where you're working now.</p> <p>15 A. At the DOD Hearing Center of Excellence.</p> <p>16 Q. That's here in San Antonio?</p> <p>17 A. Yes, sir.</p> <p>18 Q. Now, tell me what your job responsibilities</p> <p>19 are.</p> <p>20 A. I'm the branch chief of prevention and</p> <p>21 surveillance branch within the Hearing Center of</p> <p>22 Excellence.</p> <p>23 Q. And what do you do on a day-to-day basis?</p> <p>24 A. I manage a team that does research and</p> <p>25 educational activities and outreach to teach people</p>	<p style="text-align: right;">Page 28</p> <p>1 Q. Voluntarily or involuntarily?</p> <p>2 A. Voluntarily.</p> <p>3 Q. Okay. And you've been a member of that</p> <p>4 organization for more than 30 years, have you not?</p> <p>5 A. Yes, sir.</p> <p>6 Q. And tell me, Colonel, what function does</p> <p>7 that organization serve.</p> <p>8 MR. GONZALEZ: Object to form.</p> <p>9 Q. (BY MR. CICCONE) What does the organization</p> <p>10 do?</p> <p>11 A. Their mission is to prevent hearing loss</p> <p>12 from noise and other factors throughout all aspects</p> <p>13 of society.</p> <p>14 Q. Okay. Does -- where is it its office?</p> <p>15 A. In Westminster, Colorado, a suburb of</p> <p>16 Denver.</p> <p>17 Q. What are your responsibilities as president</p> <p>18 of the NHCA?</p> <p>19 A. NHCA.</p> <p>20 Q. What are your responsibilities?</p> <p>21 A. To serve as the leader at our meetings, to</p> <p>22 basically keep the association healthy and running.</p> <p>23 Q. Is it a large organization in terms of --</p> <p>24 Let me rephrase that.</p> <p>25 How many members does that association</p>
<p style="text-align: right;">Page 27</p> <p>1 about hearing loss prevention and hearing</p> <p>2 conservation.</p> <p>3 Q. When you say "people", do you mean military</p> <p>4 people or civilians as well?</p> <p>5 A. Mostly military members, that's our focus.</p> <p>6 Q. And on a day-to-day basis, do you go and</p> <p>7 speak to groups of people? Do you write papers?</p> <p>8 Tell me what you do on a day-to-day basis.</p> <p>9 A. In my branch chief position, I primarily</p> <p>10 manage people who write papers, and go speak to</p> <p>11 people.</p> <p>12 Q. Do you travel around and give speeches or</p> <p>13 seminars, or does most of your work happen here in</p> <p>14 San Antonio?</p> <p>15 A. Most of my work is here in San Antonio. I</p> <p>16 do travel occasionally.</p> <p>17 Q. I want to talk to you a little bit about</p> <p>18 some professional associations that I know that</p> <p>19 you've been a member of, and perhaps you're still a</p> <p>20 member of. Colonel, am I correct that you were the</p> <p>21 president of National Hearing Conservation</p> <p>22 Association in 2007-2008?</p> <p>23 A. Yes, sir. And I just took office as</p> <p>24 president of the National Hearing Conservation</p> <p>25 Association again this month, actually, last month.</p>	<p style="text-align: right;">Page 29</p> <p>1 have?</p> <p>2 A. Our current membership is probably in the</p> <p>3 500 to 600 range.</p> <p>4 Q. And the people that are members, are they</p> <p>5 audiologists people that are experience in hearing</p> <p>6 conservation? What kind of people belong to that</p> <p>7 organization?</p> <p>8 A. Yes, sir, audiologists, industrial</p> <p>9 hygienists, physicians, nurses, noise control</p> <p>10 engineers, anyone concerned with noise induced</p> <p>11 hearing loss.</p> <p>12 Q. And, Colonel, I also understand you were</p> <p>13 the chair of the Council for Accreditation and</p> <p>14 Occupational Hearing Conservation. It's kind of a</p> <p>15 mouthful, but is that in fact what you were?</p> <p>16 A. Yes, sir.</p> <p>17 Q. And tell me approximately when you were the</p> <p>18 chair of that organization.</p> <p>19 A. Again, years. I want to say 2009, 2010,</p> <p>20 somewhere around there.</p> <p>21 Q. And tell me what that organization does.</p> <p>22 A. CAOHC is that acronym that we used for</p> <p>23 that, CAOHC. And that organization is a</p> <p>24 certification body that trains and certifies course</p> <p>25 directors, who then teach courses to hearing</p>

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30 to 33

<p style="text-align: right;">Page 30</p> <p>1 technicians and those technicians are the people who</p> <p>2 do audiometric testing in industry, in the military,</p> <p>3 in occupational hearing conservation programs.</p> <p>4 Q. And, Colonel, does that organization</p> <p>5 publish The Hearing Conservation Manual?</p> <p>6 A. It does.</p> <p>7 Q. And I have the 2017 edition, which</p> <p>8 apparently the 5th edition. And am I correct that</p> <p>9 you were one of the editors of this fantastic manual?</p> <p>10 A. Thank you. I did have the honor of</p> <p>11 coediting that manual, yes?</p> <p>12 Q. And your co-editor was Thomas Hutchinson?</p> <p>13 A. Yes, sir.</p> <p>14 Q. Tell me a little bit about him. Does he</p> <p>15 have credentials that are somewhat similar to yours</p> <p>16 in terms of experience, education?</p> <p>17 A. He does. He's a retired Navy audiologist.</p> <p>18 Q. And, Colonel, approximately how long did it</p> <p>19 take to put this 5th edition of this Hearing</p> <p>20 Conservation Manual together?</p> <p>21 A. Too long, about four years.</p> <p>22 Q. And in addition to co-editing this 5th</p> <p>23 edition, did you actually publish or write two of the</p> <p>24 articles that are included in it?</p> <p>25 A. Yes. I co-wrote two chapters.</p>	<p style="text-align: right;">Page 32</p> <p>1 A. Yes, sir.</p> <p>2 Q. And what does that organization do?</p> <p>3 A. It's the organization of Air Force</p> <p>4 audiologists to promote what Air Force audiologists</p> <p>5 do within the Air Force.</p> <p>6 Q. And in addition to these articles that we</p> <p>7 discussed in this Hearing Conservation Manual,</p> <p>8 Colonel, is it true that you published a number of</p> <p>9 other articles on hearing conservation?</p> <p>10 A. Yes, sir.</p> <p>11 Q. And do you have any idea of the number of</p> <p>12 articles that you've published over the years on</p> <p>13 hearing conservation?</p> <p>14 A. No, sir, I've never counted.</p> <p>15 Q. Would it be more than 10?</p> <p>16 A. Yes, sir.</p> <p>17 Q. Would it be more than 20?</p> <p>18 A. Yes, sir.</p> <p>19 Q. Would it be more than 30?</p> <p>20 A. I don't know.</p> <p>21 Q. Okay. In addition to publishing articles,</p> <p>22 Colonel, have you spoken at conferences around the</p> <p>23 country, perhaps even internationally, on hearing</p> <p>24 conservation?</p> <p>25 A. Yes, sir.</p>
<p style="text-align: right;">Page 31</p> <p>1 Q. Right. And that's chapter 13 and 14 of</p> <p>2 this manual?</p> <p>3 A. I think so, yes, sir.</p> <p>4 Q. And in addition to what we discussed,</p> <p>5 Colonel, are you a fellow in the American Academy of</p> <p>6 Audiology?</p> <p>7 A. Yes, sir.</p> <p>8 Q. And tell me what that organization does.</p> <p>9 A. The American Academy of Audiology is</p> <p>10 professional organization for audiologists that</p> <p>11 certifies us, tests us to basically become</p> <p>12 audiologists.</p> <p>13 Q. How long have you been a fellow in that</p> <p>14 organization?</p> <p>15 A. A fellow since probably the late 1980s.</p> <p>16 Q. And are you also a certified member of the</p> <p>17 American Speech Language Hearing Association?</p> <p>18 A. Yes, sir.</p> <p>19 Q. And what does that organization do?</p> <p>20 A. That is another professional organization</p> <p>21 that certifies and basically continues our continuing</p> <p>22 education units and those sorts of things for</p> <p>23 audiologists.</p> <p>24 Q. Your a member of the Air Force Audiology</p> <p>25 Organization?</p>	<p style="text-align: right;">Page 33</p> <p>1 Q. Have you spoken internationally?</p> <p>2 A. In Canada.</p> <p>3 Q. And in addition, have you traveled around</p> <p>4 the country giving seminars on hearing conservation?</p> <p>5 A. Yes, sir.</p> <p>6 Q. Do you still do that?</p> <p>7 A. No, sir.</p> <p>8 Q. Colonel, explain to me if you can, why is</p> <p>9 it important for people to try to conserve their</p> <p>10 hearing?</p> <p>11 A. Gosh, why is it important for people to</p> <p>12 see? It's important because hearing is a precious</p> <p>13 sense.</p> <p>14 Q. Colonel, once someone's hearing has been</p> <p>15 damaged, does it ever come back?</p> <p>16 A. It can.</p> <p>17 Q. If it's been permanently damaged, is there</p> <p>18 any way to bring it back?</p> <p>19 MR. GONZALEZ: Object to form.</p> <p>20 THE WITNESS: Not generally, no.</p> <p>21 Q. (BY MR. CICCONE) Colonel, I want you to</p> <p>22 explain to us, there's an Environmental Protection</p> <p>23 Agency, EPA, definition of excessive noise. Do you</p> <p>24 know what that definition is?</p> <p>25 A. The EPA's definition?</p>

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<p style="text-align: right;">Page 34</p> <p>1 Q. Yes, it's in a regulation. Tell me how you</p> <p>2 would define excessive noise.</p> <p>3 MR. GONZALEZ: Object, form.</p> <p>4 THE WITNESS: Various regulations</p> <p>5 define excessive noise at different thresholds. So</p> <p>6 it depends on the jurisdiction, on how many people</p> <p>7 you want to protect out of the population. So it</p> <p>8 depends I guess is the answer.</p> <p>9 Q. Well, give us some examples of some of the</p> <p>10 regulations of some of the definitions of excessive</p> <p>11 noise that you're familiar with?</p> <p>12 MR. GONZALEZ: Object to form.</p> <p>13 THE WITNESS: The Occupational Safety</p> <p>14 and Health Administration, OSHA, has a definition of</p> <p>15 hazardous noise being above 90 dBA for 8-hours a day.</p> <p>16 Q. (BY MR. CICCONE) Okay. What does dBA mean,</p> <p>17 doing business as?</p> <p>18 A. No, sir. Decibels A-weighted.</p> <p>19 Q. That's measure of, what, sound pressure</p> <p>20 level?</p> <p>21 A. Yes, sir.</p> <p>22 Q. Okay. And I don't want to get too</p> <p>23 technical or else we'll lose people. But you're</p> <p>24 saying that OSHA defines excessive noise as over 90</p> <p>25 dBA over a period of how long?</p>	<p style="text-align: right;">Page 36</p> <p>1 know, air guns to military weaponry? Do we need</p> <p>2 to -- it very much depends.</p> <p>3 Q. (BY MR. CICCONE) How about gunpowder-type</p> <p>4 firearms?</p> <p>5 MR. GONZALEZ: Object to form.</p> <p>6 THE WITNESS: I'm not sure what that</p> <p>7 means.</p> <p>8 Q. (BY MR. CICCONE) Have you written any</p> <p>9 articles, Colonel, that survey the decibel range</p> <p>10 impulsive noise that various firearms can produce?</p> <p>11 A. I have written an article that summarizes</p> <p>12 some research that other researchers did looking at</p> <p>13 impulsive noise and different ranges for recreational</p> <p>14 firearms.</p> <p>15 Q. Okay. And with respect to recreational</p> <p>16 firearms, what was the range that you observed that</p> <p>17 those firearms can produce?</p> <p>18 A. For that particular range of recreational</p> <p>19 firearms, generally 120 decibel peak to 170-ish</p> <p>20 decibel peak.</p> <p>21 Q. And, Colonel, what is the decibel level at</p> <p>22 which hearing can become potentially damaged?</p> <p>23 MR. GONZALEZ: Object to form.</p> <p>24 THE WITNESS: It's a very individual</p> <p>25 difference. Some people are more tolerant to noise</p>
<p style="text-align: right;">Page 35</p> <p>1 A. Eight hours.</p> <p>2 Q. And, Colonel, is there a difference between</p> <p>3 continuous noise and impulsive noise?</p> <p>4 A. Yes, sir.</p> <p>5 Q. And can you tell us, very generally, what</p> <p>6 continuous noise is as compared to impulsive noise?</p> <p>7 A. Without getting very technical and keeping</p> <p>8 it very simple, continuous noise is a noise that's</p> <p>9 ongoing, like (demonstrating). Impulse noise is a</p> <p>10 noise that is very quick. There are some definitions</p> <p>11 of how quick it needs to be, but an example is</p> <p>12 (demonstrating).</p> <p>13 Q. Do firearms produce continuous noise or</p> <p>14 impulsive noise?</p> <p>15 A. Impulsive noise.</p> <p>16 Q. Okay. And does the level of impulsive</p> <p>17 noise that a firearm generates depend on a lot of</p> <p>18 things, including the type of firearm, the caliber of</p> <p>19 ammunition, and other factors as well?</p> <p>20 A. Yes, sir.</p> <p>21 Q. And can you give me the range of impulsive</p> <p>22 noise that firearms can generate?</p> <p>23 MR. GONZALEZ: Object to form.</p> <p>24 THE WITNESS: Oh, boy. Again, it</p> <p>25 depends. Are we talking about firearms from, you</p>	<p style="text-align: right;">Page 37</p> <p>1 than others.</p> <p>2 Q. (BY MR. CICCONE) Give me the average.</p> <p>3 MR. GONZALEZ: Objection form.</p> <p>4 THE WITNESS: I'm not sure. An</p> <p>5 average of what?</p> <p>6 Q. (BY MR. CICCONE) The number that I've seen</p> <p>7 in the literature and I'll show you the articles, and</p> <p>8 we can discuss them. 140 decibel or more can</p> <p>9 permanently damage a person's hearing. Is that -- is</p> <p>10 that a figure that you've seen or you're familiar</p> <p>11 with?</p> <p>12 MR. GONZALEZ: Objection, form.</p> <p>13 THE WITNESS: Yes, it is.</p> <p>14 Q. (BY MR. CICCONE) And do you concur with</p> <p>15 that range, that 140 decibels or more can damage a</p> <p>16 person's hearing?</p> <p>17 MR. GONZALEZ: Object to form.</p> <p>18 THE WITNESS: It can.</p> <p>19 Q. (BY MR. CICCONE) Okay. And you told us</p> <p>20 that firearms can produce up to 170 decibels of</p> <p>21 impulsive noise?</p> <p>22 A. Yes, it does.</p> <p>23 Q. And do you agree that 170 decibels is</p> <p>24 certainly more than 140 decibels?</p> <p>25 A. Yes, sir.</p>

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<p style="text-align: right;">Page 38</p> <p>1 Q. And do you agree that a person can</p> <p>2 experience a noise induced hearing loss as a result</p> <p>3 of unprotected exposure to a firearm?</p> <p>4 A. Yes, sir.</p> <p>5 Q. And, Colonel, based on your experience, can</p> <p>6 a single unprotected exposure to a gunshot cause</p> <p>7 permanent hearing damage?</p> <p>8 MR. GONZALEZ: Object to form.</p> <p>9 THE WITNESS: It depends.</p> <p>10 Q. (BY MR. CICCONE) Okay. Depends on what?</p> <p>11 A. The distance from the firearm, the distance</p> <p>12 from the muzzle, the caliber, environment that you're</p> <p>13 in, lots of variables.</p> <p>14 Q. What are some of the environmental factors</p> <p>15 that will affect a person's risk of noise induced</p> <p>16 hearing loss from a firearm's noise?</p> <p>17 A. Environmental factors?</p> <p>18 Q. Yes.</p> <p>19 A. I'm not sure if you consider how close the</p> <p>20 person is to the firearm an environmental factor, but</p> <p>21 that's one.</p> <p>22 Q. Well, let's talk about specifically an</p> <p>23 indoor firing range. Do you believe that somebody</p> <p>24 that's on a indoor firing range is perhaps exposed to</p> <p>25 a greater risk of noise induced hearing loss from</p>	<p style="text-align: right;">Page 40</p> <p>1 hearing.</p> <p>2 Q. (BY MR. CICCONE) Has it been your</p> <p>3 experience when addressing groups of people, perhaps</p> <p>4 employees or at conferences, that people do not</p> <p>5 appreciate how vulnerable they may be to noise</p> <p>6 induced hearing loss from unprotected exposure to</p> <p>7 noises?</p> <p>8 MR. GONZALEZ: Object to form.</p> <p>9 THE WITNESS: Yes. It's possible</p> <p>10 there are people that don't understand that.</p> <p>11 Q. (BY MR. CICCONE) Well, Colonel, if</p> <p>12 everybody understood it, then why do we need somebody</p> <p>13 like you to give conferences and seminars and write</p> <p>14 papers?</p> <p>15 MR. GONZALEZ: Object to form.</p> <p>16 Q. (BY MR. CICCONE) Did you say "exactly"?</p> <p>17 I'm sorry. I didn't hear your answer.</p> <p>18 A. No. I'm sorry. I said, well, yes. Yes.</p> <p>19 I would like to think people knew, but yes, I've</p> <p>20 spent my career telling people, and yes.</p> <p>21 Q. All right. And, Colonel, we talked a</p> <p>22 little early about there's different styles of</p> <p>23 hearing protection device. I think we mentioned</p> <p>24 there's earplugs and there's earmuffs. And there's</p> <p>25 also electronic hearing protectors. Are you familiar</p>
<p style="text-align: right;">Page 39</p> <p>1 unprotected exposure to gunfire noise than somebody</p> <p>2 who may be outside?</p> <p>3 MR. GONZALEZ: Object to form.</p> <p>4 (Reporter clarification)</p> <p>5 THE WITNESS: In general, yes.</p> <p>6 Q. (BY MR. CICCONE) Why is that, Colonel?</p> <p>7 A. Why is it that indoor firing could be more</p> <p>8 hazardous than outdoor?</p> <p>9 Q. Yes.</p> <p>10 A. Because of the way sound waves travel.</p> <p>11 Q. Can you articulate that a little bit more?</p> <p>12 A. In an outdoor environment, sound waves from</p> <p>13 a noise continue to go outward. In an enclosed</p> <p>14 indoor environment, sound waves may reverberate</p> <p>15 around the walls.</p> <p>16 Q. Colonel, based upon your years of</p> <p>17 experience in this industry, do you believe that</p> <p>18 people understand the importance of hearing</p> <p>19 conservation to the extent that you believe that they</p> <p>20 should?</p> <p>21 MR. GONZALEZ: Objection, form.</p> <p>22 THE WITNESS: I don't know that I can</p> <p>23 speak for the general population. But I think most</p> <p>24 people have some understanding of the dangers of</p> <p>25 noise induced hearing loss -- of high noise to your</p>	<p style="text-align: right;">Page 41</p> <p>1 at all with those devices?</p> <p>2 A. Yes, sir.</p> <p>3 Q. Okay. And that's really going to be beyond</p> <p>4 the scope of the discussion, but I want to focus on</p> <p>5 earmuffs and earplugs, if that's okay for the</p> <p>6 purposes of the depositions.</p> <p>7 A. Yes.</p> <p>8 Q. And what I want to ask you specifically,</p> <p>9 Colonel, is that has it been your experience over the</p> <p>10 years that -- that some people don't wear hearing</p> <p>11 protectors correctly or properly or appropriately?</p> <p>12 A. Yes, that happens.</p> <p>13 Q. Do you believe, Colonel, that a person has</p> <p>14 to have some -- some basic skills to know how to wear</p> <p>15 hearing protectors appropriately or properly or</p> <p>16 correctly?</p> <p>17 MR. GONZALEZ: Objection, form.</p> <p>18 THE WITNESS: I'm not sure what "basic</p> <p>19 skills" means.</p> <p>20 Q. (BY MR. CICCONE) Well, this is a -- I think</p> <p>21 that's a word you will have used in some of the</p> <p>22 materials that we're going to look at. What does</p> <p>23 that word "basic skills" mean to you?</p> <p>24 MR. GONZALEZ: Object to form.</p> <p>25 THE WITNESS: Depends on a context.</p>

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<p style="text-align: right;">Page 42</p> <p>1 Q. (BY MR. CICCONE) Okay. Well, say, in</p> <p>2 general in an environment where there are laypeople</p> <p>3 who are not audiologists like you, what basic skills</p> <p>4 do you think people would need in order to know how</p> <p>5 to wear hearing protection appropriately?</p> <p>6 MR. GONZALEZ: Object to form.</p> <p>7 THE WITNESS: What basic skills would</p> <p>8 somebody need? Maybe the ability to read and follow</p> <p>9 directions if they haven't worn a hearing protection</p> <p>10 for before. The ability to use their hands to</p> <p>11 manipulate something.</p> <p>12 Q. (BY MR. CICCONE) I want to -- Let me</p> <p>13 briefly talk to you about earmuffs because we're</p> <p>14 going to focus most of our discussion on the</p> <p>15 earplugs. But I've got these Howard Leight earmuffs</p> <p>16 that we used in some other depositions that I bought</p> <p>17 from Honeywell.</p> <p>18 And I'm going to put these on, and I</p> <p>19 want you to --</p> <p>20 MR. CICCONE: You don't have to put me</p> <p>21 on camera.</p> <p>22 Q. (BY MR. CICCONE) I'm going to put them on.</p> <p>23 Am I wearing them correctly?</p> <p>24 MR. GONZALEZ: Objection, form.</p> <p>25 THE WITNESS: Yes.</p>	<p style="text-align: right;">Page 44</p> <p>1 Q. Or all three, perhaps?</p> <p>2 (Reporter clarification)</p> <p>3 A. Or all three perhaps? I don't know that</p> <p>4 you need all three, maybe some people do.</p> <p>5 Q. Well, let's talk about earplugs. Do you</p> <p>6 believe, Colonel, that someone needs at least some</p> <p>7 level of skill to be able to properly wear earplugs?</p> <p>8 MR. GONZALEZ: Object to form.</p> <p>9 THE WITNESS: Again, skills of manual</p> <p>10 dexterity and the ability to -- although I have to</p> <p>11 say, I was going to say the ability to reach over</p> <p>12 your head, but I've seen people fit earplugs without</p> <p>13 reaching over their head.</p> <p>14 Q. Colonel, can you list some disadvantages of</p> <p>15 disposal earplugs?</p> <p>16 MR. GONZALEZ: Object to form.</p> <p>17 THE WITNESS: Disadvantages of</p> <p>18 disposable earplugs would include that when you have</p> <p>19 dirty hands, it's -- you may get the earplug dirty by</p> <p>20 rolling it up. Foam earplugs are slightly harder to</p> <p>21 get a good fit with than some of the other types of</p> <p>22 earplugs.</p> <p>23 Other disadvantages are, you know, can</p> <p>24 be expensive because if you go through a lot of them,</p> <p>25 they can add up expense-wise.</p>
<p style="text-align: right;">Page 43</p> <p>1 Q. (BY MR. CICCONE) You want to put them on so</p> <p>2 you can show the camera.</p> <p>3 MR. GONZALEZ: No. Counsel, I'm not</p> <p>4 going to allow her to do that --</p> <p>5 MR. CICCONE: Okay.</p> <p>6 MR. GONZALEZ: -- as far as a</p> <p>7 demonstrative with the witness.</p> <p>8 Q. (BY MR. CICCONE) Tell me, Colonel, with</p> <p>9 respect to a pair of earmuffs, okay, how would you --</p> <p>10 how would a person wear them to maximize the</p> <p>11 protection that the earmuffs would provide?</p> <p>12 A. According to the directions on the package.</p> <p>13 Q. Well, Colonel, this particular package has</p> <p>14 no directions. I mean, could you give us some</p> <p>15 general pointers on what someone should do to wear a</p> <p>16 pair of earmuffs appropriately or correctly?</p> <p>17 MR. GONZALEZ: Object to form.</p> <p>18 Q. (BY MR. CICCONE) Oh, the insert.</p> <p>19 A. Yes.</p> <p>20 Q. Good, thank you. Do you believe that</p> <p>21 somebody needs to read instructions in order to know</p> <p>22 how to wear, for example, earmuffs correctly, or have</p> <p>23 some prior experience or perhaps have some</p> <p>24 instruction?</p> <p>25 A. One or the other of those things.</p>	<p style="text-align: right;">Page 45</p> <p>1 Q. (BY MR. CICCONE) Colonel, are proper</p> <p>2 fitting techniques for earplugs difficult to learn?</p> <p>3 MR. GONZALEZ: Object to form.</p> <p>4 THE WITNESS: I don't believe so.</p> <p>5 (Exhibit 2 marked)</p> <p>6 Q. (BY MR. CICCONE) Well, remember, we were</p> <p>7 talking about The Hearing Conservation Manual,</p> <p>8 including Chapter 13 that you coauthored. It's been</p> <p>9 marked as an exhibit. It's Exhibit No. 2.</p> <p>10 And I'd like to direct your attention</p> <p>11 to page 108 where you've listed the disadvantages of</p> <p>12 disposable foam earplugs. And you've listed</p> <p>13 "attenuation depends highly on fit." Then you say,</p> <p>14 "proper fitting technique can be difficult to learn."</p> <p>15 And then of course you talked about the hygiene</p> <p>16 issues.</p> <p>17 Do you remember writing that?</p> <p>18 A. I do.</p> <p>19 Q. Do you think that's correct?</p> <p>20 A. It can be difficult to learn.</p> <p>21 Q. Right, can be difficult to learn.</p> <p>22 And tell me, Colonel, why you believe</p> <p>23 that proper fitting techniques can be difficult to</p> <p>24 learn.</p> <p>25 A. Compared to many of the other hearing</p>

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<p style="text-align: right;">Page 46</p> <p>1 protectors, there's more steps involved in fitting a</p> <p>2 foam earplug than, say, a reusable earplug or</p> <p>3 earmuff.</p> <p>4 Q. Anything else?</p> <p>5 A. One of those steps is rolling it down, and</p> <p>6 again it's important to follow directions and do that</p> <p>7 appropriately.</p> <p>8 Q. Well, we're going to talk more about that</p> <p>9 in a minute.</p> <p>10 Colonel, do you believe that it is</p> <p>11 important to have at least some instruction to learn</p> <p>12 how to properly wear foam earplugs?</p> <p>13 MR. GONZALEZ: Objection, form.</p> <p>14 THE WITNESS: It -- it can be. It</p> <p>15 very much depends on the person's ears. Some ears</p> <p>16 are easy to fit.</p> <p>17 Q. (BY MR. CICCONE) Let me direct your</p> <p>18 attention to Chapter 14 of The Hearing Conservation</p> <p>19 Manual that I believe that you coauthored. And what</p> <p>20 you say this is, this is first paragraph on page 121:</p> <p>21 Too often the person providing hearing</p> <p>22 protection training is little more than a dispenser,</p> <p>23 handing the worker earplugs and saying, quote, "Here</p> <p>24 use this around loud noise," end quote, or "Stick</p> <p>25 these in your ears", end quote.</p>	<p style="text-align: right;">Page 48</p> <p>1 want to play that I believe is you, and it came from</p> <p>2 the Honeywell site or YouTube or one of the two, and</p> <p>3 it's only 30 seconds long.</p> <p>4 But before we play the video, you talk</p> <p>5 in the video about VeriPRO, and tell me what VeriPRO</p> <p>6 is.</p> <p>7 A. VeriPRO is a Honeywell earplug fit testing</p> <p>8 system.</p> <p>9 Q. And is it an electronic device? Is it some</p> <p>10 sort of a mechanical tool? What is it exactly?</p> <p>11 A. It's a software and patented earmuff system</p> <p>12 that actually allows you to measure how much</p> <p>13 protection a person is getting from their particular</p> <p>14 earplug.</p> <p>15 Q. And you said it's proprietary or it's</p> <p>16 patented?</p> <p>17 A. It is.</p> <p>18 Q. Does Honeywell own the patent, if you know?</p> <p>19 A. I assume they do, yes.</p> <p>20 Q. Does Honeywell sell that equipment, if you</p> <p>21 know?</p> <p>22 MR. GONZALEZ: Objection, form.</p> <p>23 THE WITNESS: Yes, they do.</p> <p>24 Q. (BY MR. CICCONE) And do you have experience</p> <p>25 using this equipment?</p>
<p style="text-align: right;">Page 47</p> <p>1 Do you remember writing that?</p> <p>2 A. Yes.</p> <p>3 Q. Have you encountered situations --</p> <p>4 MR. GONZALEZ: What page is that,</p> <p>5 Counsel?</p> <p>6 MR. CICCONE: This is page 121.</p> <p>7 MR. GONZALEZ: Thank you.</p> <p>8 Q. (BY MR. CICCONE) Colonel, have you</p> <p>9 encountered situations where workers are given</p> <p>10 hearing protectors, but are given no instructions or</p> <p>11 inadequate instruction with respect to how to</p> <p>12 properly wear them?</p> <p>13 MR. GONZALEZ: Object to form.</p> <p>14 THE WITNESS: Yes.</p> <p>15 Q. (BY MR. CICCONE) And do you believe that</p> <p>16 it's potentially dangerous to workers to be simply</p> <p>17 given earplugs with no instruction on how to wear</p> <p>18 them and then work in a noisy environment?</p> <p>19 A. Yes.</p> <p>20 Q. Okay. And tell me why it's potentially</p> <p>21 dangerous.</p> <p>22 A. If they're exposed to hazardous noise and</p> <p>23 not fitting the hearing protector properly, they can</p> <p>24 eventually get noise induced hearing loss.</p> <p>25 Q. Now, Colonel, there's a short video that I</p>	<p style="text-align: right;">Page 49</p> <p>1 A. Yes, sir.</p> <p>2 Q. What experience do you have using that</p> <p>3 equipment?</p> <p>4 A. Part of my job at Honeywell was to teach</p> <p>5 people how to use that equipment, to do what we</p> <p>6 called implementation visits to teach them how to use</p> <p>7 it.</p> <p>8 Q. Okay. And so, for example, would you go to</p> <p>9 an employer's facility, if you were invited to do so,</p> <p>10 and teach employees how to properly wear earplugs and</p> <p>11 then verify their performance with this equipment</p> <p>12 you've discussed?</p> <p>13 A. What I would do is I would go to an</p> <p>14 employer's place, who purchased VeriPRO, and teach</p> <p>15 the safety manager or the industrial hygienist or</p> <p>16 whoever was going to administer the test going</p> <p>17 forward to administer the VeriPRO test.</p> <p>18 Q. Okay. And so this VeriPRO test would</p> <p>19 verify that somebody was wearing hearing protection</p> <p>20 correctly?</p> <p>21 A. Yes, sir.</p> <p>22 Q. Okay. Let's -- I want to play the video.</p> <p>23 It's only 30 seconds long.</p> <p>24 MR. GONZALEZ: Counsel, before you do</p> <p>25 that, can you read into the record the YouTube</p>

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<p style="text-align: right;">Page 50</p> <p>1 website, just so there's a record.</p> <p>2 MR. CICCONE: Well, it's going to be</p> <p>3 on the flash drive that I gave. We produced it. And</p> <p>4 it either came from Honeywell's website or from</p> <p>5 YouTube or from both. It may be published on both.</p> <p>6 MR. GONZALEZ: Can we -- can we do</p> <p>7 this -- I guess later on somehow leave a blank, so we</p> <p>8 can insert it somewhere?</p> <p>9 MR. CICCONE: Sure.</p> <p>10 MR. GONZALEZ: We'll leave a blank on</p> <p>11 the transcript, and the blank will have in</p> <p>12 parenthesis, insert the website address.</p> <p>13 (INSERT WEBSITE ADDRESS)</p> <p>14 MR. CICCONE: Ready?</p> <p>15 Q. (BY MR. CICCONE) Well, first of all, is</p> <p>16 that you, Teresa Y. Schultz, PhD, Lieutenant Colonel,</p> <p>17 USAF, Retired?</p> <p>18 A. Yes, sir.</p> <p>19 Q. And this "Hear Forever" trademark, what is</p> <p>20 that?</p> <p>21 A. That was an educational campaign that</p> <p>22 Honeywell had to teach people about hearing</p> <p>23 conservation.</p> <p>24 Q. Okay. And you say -- you talk about the</p> <p>25 beauty of VeriPRO earplug fit testing. Is that what</p>	<p style="text-align: right;">Page 52</p> <p>1 A. Yes, sir.</p> <p>2 Q. Okay. And does that refresh your</p> <p>3 recollection of what basic skills means in terms of</p> <p>4 fitting hearing protectors?</p> <p>5 MR. GONZALEZ: Object to form.</p> <p>6 THE WITNESS: In that context, I would</p> <p>7 say the basic skills are taught on the instruction</p> <p>8 packages of earmuffs and earplugs.</p> <p>9 Q. (BY MR. CICCONE) Colonel, in your</p> <p>10 experience have you found that it's helpful to</p> <p>11 demonstrate to people how to properly wear hearing</p> <p>12 protectors?</p> <p>13 MR. GONZALEZ: Object to form.</p> <p>14 THE WITNESS: It can be helpful.</p> <p>15 Q. (BY MR. CICCONE) And didn't you say that in</p> <p>16 the video?</p> <p>17 A. Yes.</p> <p>18 Q. Okay. Colonel, in the other article that</p> <p>19 we talked about briefly in The Hearing Conservation</p> <p>20 Manual, I'm going to cite you the page, 121 --</p> <p>21 MR. GONZALEZ: And that's exhibit?</p> <p>22 MR. CICCONE: Chapter 14 we didn't</p> <p>23 copy, but I will copy it later.</p> <p>24 Q. (BY MR. CICCONE) This is only one line.</p> <p>25 Colonel, you said on page 121, "Numerous studies have</p>
<p style="text-align: right;">Page 51</p> <p>1 it says?</p> <p>2 A. That's what it says.</p> <p>3 Q. Okay. And when you -- you made this video.</p> <p>4 Do you remember making the video?</p> <p>5 A. Yes, sir.</p> <p>6 Q. And do you remember when you made the</p> <p>7 video?</p> <p>8 A. I couldn't tell you a year.</p> <p>9 Q. Like, within the last ten years?</p> <p>10 A. Yes.</p> <p>11 Q. And, obviously, you made it while you were</p> <p>12 with Honeywell?</p> <p>13 A. Yes.</p> <p>14 Q. And whose idea was it that you make this</p> <p>15 video? Was it your idea or was it somebody else's</p> <p>16 idea?</p> <p>17 A. It was somebody else's idea.</p> <p>18 Q. Let's play it, and then if you remember</p> <p>19 more about it.</p> <p>20 (Exhibit 3 marked)</p> <p>21 (Video playing)</p> <p>22 (INSERT WEBSITE ADDRESS)</p> <p>23 Q. (BY MR. CICCONE) Okay. Colonel, you heard</p> <p>24 the video. Did you hear you use the words, "basic</p> <p>25 skills"?</p>	<p style="text-align: right;">Page 53</p> <p>1 shown that the best way for workers to learn about</p> <p>2 hearing protection is through one-on-one training.</p> <p>3 Workers need to know not only when and why they</p> <p>4 should use earplugs, but how to use them</p> <p>5 effectively."</p> <p>6 Okay. Do you remember writing that?</p> <p>7 A. Yes, sir.</p> <p>8 Q. And do you think that's true?</p> <p>9 A. Yes, sir, that applies to workers.</p> <p>10 Q. Okay. Well, would it apply to anybody</p> <p>11 who's potentially exposed to high noise levels?</p> <p>12 MR. GONZALEZ: Objection, form.</p> <p>13 THE WITNESS: It could.</p> <p>14 Q. (BY MR. CICCONE) Okay. Colonel, why do you</p> <p>15 believe that the best way for workers to learn about</p> <p>16 hearing protection is through one-on-one training?</p> <p>17 A. Because everybody's ear canal is a little</p> <p>18 different.</p> <p>19 Q. Any other reasons?</p> <p>20 A. That's the main reason.</p> <p>21 Q. Colonel, have you instructed people</p> <p>22 one-on-one, or perhaps even in groups, on how to</p> <p>23 properly wear earplugs?</p> <p>24 A. I have.</p> <p>25 Q. And have you been invited by employers to</p>

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<p style="text-align: right;">Page 54</p> <p>1 instruct their employees on how to properly wear</p> <p>2 earplugs?</p> <p>3 A. Yes.</p> <p>4 Q. And, Colonel, when you were in the Air</p> <p>5 Force, did you ever instruct military personnel on</p> <p>6 how to properly wear hearing protection?</p> <p>7 A. Yes.</p> <p>8 Q. Now, you talked just briefly about</p> <p>9 everybody's ear canal being a little different.</p> <p>10 A. Yes, sir.</p> <p>11 Q. And, Colonel, I've got a beautiful</p> <p>12 anatomical model that we've used in some other</p> <p>13 depositions. And if it will help you illustrate your</p> <p>14 testimony, can you show us where the ear canal is?</p> <p>15 A. It's right here (indicating).</p> <p>16 Q. Okay. And is this a -- is this an actual</p> <p>17 size or is this larger than life?</p> <p>18 A. Way larger than life.</p> <p>19 Q. Okay. But does it help you to illustrate</p> <p>20 your testimony to point out where the ear canal is?</p> <p>21 A. Well, sure. It's this part right here</p> <p>22 (indicating).</p> <p>23 Q. And tell me the theory behind earplugs.</p> <p>24 What's the earplug supposed to do that will protect</p> <p>25 your hearing?</p>	<p style="text-align: right;">Page 56</p> <p>1 record.</p> <p>2 MR. CICCONE: I'm going to mark it as</p> <p>3 18.</p> <p>4 MR. GONZALEZ: Thank you.</p> <p>5 (Exhibit 18 marked)</p> <p>6 THE VIDEOGRAPHER: Excuse me, sir. We</p> <p>7 have about five minutes left on this tape.</p> <p>8 MR. CICCONE: Okay.</p> <p>9 Q. (BY MR. CICCONE) Colonel, have you ever</p> <p>10 seen Exhibit 18 before?</p> <p>11 A. Yes.</p> <p>12 Q. And when did you see it for the first time?</p> <p>13 A. I saw it when it was being developed as</p> <p>14 edits were being done on it, and I saw it as a final</p> <p>15 product.</p> <p>16 Q. And approximately when was that?</p> <p>17 A. We've done a couple versions of this. So</p> <p>18 my guess on this one would be maybe 2010, 2012,</p> <p>19 somewhere around there.</p> <p>20 Q. Ten, twelve years ago more or less?</p> <p>21 Okay.</p> <p>22 (Reporter clarification)</p> <p>23 THE WITNESS: 2010 or 2012.</p> <p>24 THE REPORTER: And then he said, "Ten</p> <p>25 or twelve years more or less?"</p>
<p style="text-align: right;">Page 55</p> <p>1 A. The earplug is designed to block the</p> <p>2 transmission of sound down the ear canal.</p> <p>3 Q. Okay. And, Colonel, with regard to</p> <p>4 earplugs, does one size earplug fit everybody?</p> <p>5 A. No.</p> <p>6 Q. Okay. And is there such a thing in the</p> <p>7 hearing protection industry as one size fits all for</p> <p>8 earplugs?</p> <p>9 A. No. It's generally people say one size</p> <p>10 fits most.</p> <p>11 Q. We talked earlier about this National</p> <p>12 Hearing Conservation Association?</p> <p>13 A. NHCA.</p> <p>14 Q. NHCA. And, of course, you were the</p> <p>15 president at one point. And there's a publication</p> <p>16 that they have published, and tell me if you've ever</p> <p>17 seen it before.</p> <p>18 I didn't mark it as an exhibit because</p> <p>19 I didn't know whether you were the author or had any</p> <p>20 involvement in its preparation.</p> <p>21 Have you ever seen it before?</p> <p>22 MR. GONZALEZ: Can you mark it,</p> <p>23 Counsel, just because we're using it.</p> <p>24 MR. CICCONE: Sure.</p> <p>25 MR. GONZALEZ: Just so there's a</p>	<p style="text-align: right;">Page 57</p> <p>1 I didn't hear your answer.</p> <p>2 MR. GONZALEZ: She said yes.</p> <p>3 THE REPORTER: Okay.</p> <p>4 Q. (BY MR. CICCONE) And, Colonel, did you have</p> <p>5 any involvement in actually writing the language</p> <p>6 that's on Exhibit 18?</p> <p>7 A. In this latest version, no, sir.</p> <p>8 Q. Okay. But you had worked on earlier</p> <p>9 versions?</p> <p>10 A. Yes, sir.</p> <p>11 Q. You actually authored some of the language?</p> <p>12 A. I helped to edit some of the language.</p> <p>13 Q. Okay. By "editing" you mean you read it</p> <p>14 and made suggestions for revisions?</p> <p>15 A. Yes, sir.</p> <p>16 Q. Okay. And, Colonel, one of the -- one of</p> <p>17 the things that is on Exhibit No. 18 reads this way,</p> <p>18 it says, "Although some expandable foam earplugs come</p> <p>19 close, there's really no such thing as a one size</p> <p>20 fits all HPD."</p> <p>21 Does HPD stand for hearing protection</p> <p>22 device?</p> <p>23 A. Yes, sir.</p> <p>24 Q. And it continues, "Each person must be</p> <p>25 individually evaluated to determine the best match of</p>

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<p style="text-align: right;">Page 58</p> <p>1 HPD for their environment, noise exposure, anatomy, 2 and hearing ability. 3 Okay. Do you understand what I just 4 read? 5 A. Yes, sir. 6 Q. Do you agree with that statement? 7 A. Yes, sir. 8 Q. And, Colonel, in Exhibit 18, the National 9 Hearing Conservation, NHCA, they also say in this 10 publication, "Don't use just tell the individual how 11 to wear HPDs, have the wearer demonstrate correct 12 placement of the device. Stress the importance of a 13 good seal for adequate noise protection. Show what a 14 good fit feels and sounds likes, and reinforce the 15 need to use HPDs at all times in noise." 16 Do you understand what I just read? 17 A. Yes, sir. 18 Q. Do you agree with that statement? 19 A. That's part of training that we do. 20 Q. Okay. 21 (Off the record discussion) 22 THE VIDEOGRAPHER: Time now is 23 3:07 p.m. We are off the record. 24 (Recess from 3:07 p.m. to 3:18 p.m.) 25 THE VIDEOGRAPHER: Time now is</p>	<p style="text-align: right;">Page 60</p> <p>1 teaching. 2 Q. Okay. Were your remarks written out ahead 3 time or was it just ad lib on camera? 4 A. Ad lib. 5 Q. Did somebody direct you, or did you just 6 turn a camera on and make a video? 7 A. We had had a cameraman, much like today, 8 and someone would ask a question, and I would 9 respond. 10 Q. How long do you think it took you to make 11 that video? 12 A. That particular one, I can't remember how 13 many takes. But probably one or two takes of doing 14 that. 15 Q. And why did you need one or two takes? 16 A. I might have stumbled over my speech a 17 little bit. 18 Q. Was that video edited later where bits and 19 pieces were stitched together from the different 20 takes? 21 A. No. 22 Q. What was your purpose, Colonel, in making 23 that video? 24 A. To provide additional training if anyone 25 wanted it, to go on to our YouTube channel for added</p>
<p style="text-align: right;">Page 59</p> <p>1 3:18 p.m. We are back on the record. 2 Q. (BY MR. CICCONE) Colonel, before the break 3 we were talking about fitting earplugs, and I've got 4 another short video of you that I'd like to show. 5 And after I show this video, which is about 2-minutes 6 long, then I've got some questions I want to ask you 7 about it. 8 MR. GONZALEZ: And then, for the 9 record, we'll have another blank and in parenthesis 10 next to the blank we'll insert the website address 11 for the video. 12 Is that okay, Mr. Ciccone? 13 MR. CICCONE: Yes. 14 MR. GONZALEZ: Thank you. 15 MR. CICCONE: Ready. 16 (Exhibit 4 marked) 17 (Video playing.) 18 (INSERT WEBSITE ADDRESS)_____ 19 Q. (BY MR. CICCONE) Colonel, do you recall 20 when you made that video? 21 A. At the same time I made the other video in 22 the earlier twenty-teens, 2010, 2011. 23 Q. Did you write the script for that video or 24 did somebody else write it? 25 A. I wasn't a script. It was just me</p>	<p style="text-align: right;">Page 61</p> <p>1 training. 2 Q. Training for who? 3 A. Training for anyone using a foam earplug. 4 Q. Okay. When you say "our YouTube channel", 5 whose YouTube channel? 6 A. Honeywell. 7 Q. Okay. And to your knowledge is that video 8 available on Honeywell's YouTube channel? 9 A. I don't know if it still is, but it was. 10 Q. Okay. Let me -- Now, we've listened to 11 you, and I don't want to go back over the materials, 12 and I've got earplugs and I don't want you to 13 demonstrate how to put the earplugs in. 14 But what you did talk about that I 15 want to get you to expand upon, is this notion of: 16 You said that there's a corner in a person's ear 17 canal. We've got the model, and if you don't mind 18 showing us on the model where this corner is that you 19 were talking about. 20 A. So the ear canal is sort of in three parts. 21 There's a part right down there by the eardrum that 22 is basically skin on cartilaginous on bone, and you 23 won't be down there. 24 There's another part in there that has 25 a little bit of padding in between. And then on the</p>

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<p style="text-align: right;">Page 62</p> <p>1 outside, the part that you sort of see when you look</p> <p>2 at somebody's ear, has a bit of a curve in most ear</p> <p>3 canals, one way or another, either up or down or back</p> <p>4 or forward. And so pulling the ear from the outside,</p> <p>5 like I demonstrated on the video, straightens that</p> <p>6 out a little bit.</p> <p>7 Q. I see. And, Colonel, explain to me again,</p> <p>8 if you don't mind, why is it important that you roll</p> <p>9 the earplug down tight, in order to get around that</p> <p>10 corner that you talked about in the video?</p> <p>11 MR. GONZALEZ: Object to form.</p> <p>12 THE WITNESS: Rolling the earplug is</p> <p>13 important to get a proper fit.</p> <p>14 Q. (BY MR. CICCONE) Okay. And when you insert</p> <p>15 that earplug, is there any danger that you could</p> <p>16 actually touch your eardrum?</p> <p>17 A. No. It's not exactly to scale, but an ear</p> <p>18 canal is maybe about this long.</p> <p>19 Q. About the length of your little finger?</p> <p>20 A. Yes. And an earplug only goes in about</p> <p>21 that far.</p> <p>22 Q. Okay. And in the video you were</p> <p>23 demonstrating this reach around technique. Where,</p> <p>24 for example, if I wanted to put the plug in my left</p> <p>25 ear, I would reach around my head with my right hand</p>	<p style="text-align: right;">Page 64</p> <p>1 to do it as well.</p> <p>2 Q. And, Colonel, in the video you talk about</p> <p>3 how it's sometimes helpful to give people feedback by</p> <p>4 taking a picture of the person with a cell phone or a</p> <p>5 camera, for example. And explain to me again why</p> <p>6 that would be helpful to teaching a person to</p> <p>7 properly wear an earplug.</p> <p>8 MR. GONZALEZ: Objection, form.</p> <p>9 THE WITNESS: It's an additional piece</p> <p>10 of information because we can't see our ear canals,</p> <p>11 and having a camera take a picture of it while the</p> <p>12 person opens it, let's them see their ear canal open.</p> <p>13 And it provides a feedback of: Oh, I see how it</p> <p>14 opens when I do that.</p> <p>15 Q. (BY MR. CICCONE) Well, Colonel, is it so</p> <p>16 difficult to learn how to do this that somebody would</p> <p>17 need that kind of feedback?</p> <p>18 A. No, sir.</p> <p>19 MR. GONZALEZ: Objection, form.</p> <p>20 Q. (BY MR. CICCONE) Then why is it -- why do</p> <p>21 you find it helpful to give somebody feedback by</p> <p>22 using a cell phone camera?</p> <p>23 MR. GONZALEZ: Object to form.</p> <p>24 THE WITNESS: Just an additional</p> <p>25 training technique.</p>
<p style="text-align: right;">Page 63</p> <p>1 and pull my ear up and out to straighten the ear</p> <p>2 canal?</p> <p>3 A. Yes.</p> <p>4 Q. And, Colonel, does it matter what hand you</p> <p>5 use if you're going to insert the plug in our left</p> <p>6 ear?</p> <p>7 For example, why can't I use my left</p> <p>8 hand to put my ear out and back, and then insert the</p> <p>9 plug with my right hand.</p> <p>10 A. You could, it's just not as easy.</p> <p>11 Q. And is this a technique that you developed</p> <p>12 yourself or is this a technique that was developed by</p> <p>13 other people in hearing conservation community?</p> <p>14 MR. GONZALEZ: Objection, form.</p> <p>15 THE WITNESS: This is a technique that</p> <p>16 everybody in the hearing conservation community uses.</p> <p>17 Q. (BY MR. CICCONE) Okay. Going back how far?</p> <p>18 A. As long as I've been in the business.</p> <p>19 Q. And that's over 30 years?</p> <p>20 A. Yes.</p> <p>21 Q. Did somebody teach you how to do this?</p> <p>22 A. Well, I've looked at a lot of instructions</p> <p>23 on hearing protectors, and then probably gone to</p> <p>24 other people's seminars and shared teaching</p> <p>25 techniques, and -- so, yes, people have taught me how</p>	<p style="text-align: right;">Page 65</p> <p>1 Q. (BY MR. CICCONE) Okay. And you also talk</p> <p>2 in this video about wiggling the earplug. I don't</p> <p>3 quite understand what you mean when you say "wiggle</p> <p>4 the earplug". Wiggle it in what way?</p> <p>5 A. Just as you insert the earplugs.</p> <p>6 Q. Okay. And, Colonel, can you rotate the</p> <p>7 earplug as you're inserting it to help see it?</p> <p>8 A. Yes.</p> <p>9 Q. Do people do that?</p> <p>10 A. Yes.</p> <p>11 Q. Is that something that you recommend?</p> <p>12 A. Yes.</p> <p>13 Q. Can a person moisten the earplug, for</p> <p>14 example, by putting it in his or her mouth to help</p> <p>15 insert it?</p> <p>16 MR. GONZALEZ: Objection, form.</p> <p>17 THE WITNESS: People do.</p> <p>18 Q. (BY MR. CICCONE) Do you recommend that?</p> <p>19 A. No.</p> <p>20 Q. Why not?</p> <p>21 A. Hygiene.</p> <p>22 Q. And finally, you talked about letting the</p> <p>23 earplug expand in your ear. Is that important?</p> <p>24 A. Generally, if you put the earplug in deep</p> <p>25 enough into your ear canal, it's going to expand</p>

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<p style="text-align: right;">Page 66</p> <p>1 without you doing anything. If you don't have it</p> <p>2 deeply inserted, just letting it expand, listening to</p> <p>3 it expand, again just gives you some additional</p> <p>4 information feedback that you're getting a good fit.</p> <p>5 Q. And, Colonel, how does somebody know if the</p> <p>6 earplugs are correctly inserted? You talked about</p> <p>7 this VeriPRO device, but without that kind of device</p> <p>8 how would somebody know that the earplugs are</p> <p>9 correctly inserted?</p> <p>10 MR. GONZALEZ: Objection, form.</p> <p>11 THE WITNESS: Intuition. For example,</p> <p>12 if you put your fingers up to your earplugs -- your</p> <p>13 ear canals and close them off and your voice sounded</p> <p>14 muffled and everything got quiet, that's how you know</p> <p>15 you're getting a good fit.</p> <p>16 Q. (BY MR. CICCONE) Colonel, when somebody is</p> <p>17 correctly wearing earplugs, can the person generally</p> <p>18 hear normal speech by people around him or her?</p> <p>19 MR. GONZALEZ: Objection, form.</p> <p>20 THE WITNESS: Speech, if they're</p> <p>21 wearing the earplug properly, is likely to be</p> <p>22 diminished.</p> <p>23 Q. (BY MR. CICCONE) But can you still hear</p> <p>24 somebody who is speaking in a normal tone of voice if</p> <p>25 you're wearing your earplugs properly?</p>	<p style="text-align: right;">Page 68</p> <p>1 decibels, would the earplug wearer need a complete</p> <p>2 seal in order to be protected against the high noise</p> <p>3 level?</p> <p>4 MR. GONZALEZ: Objection, form.</p> <p>5 THE WITNESS: Yeah. There's some</p> <p>6 studies on impulse noise that show that even with</p> <p>7 somewhat degraded fit, you can still be protected</p> <p>8 from impulse noise with hearing protectors.</p> <p>9 Q. (BY MR. CICCONE) Okay. When you say</p> <p>10 "somewhat protected", what do you mean?</p> <p>11 A. Get enough attenuation to not get a</p> <p>12 temporary hearing loss or a permanent hearing loss.</p> <p>13 Q. Have there been any studies that have been</p> <p>14 done that actually document how much attenuation from</p> <p>15 impulse noise that a person receives from improperly</p> <p>16 fitted earplugs?</p> <p>17 MR. GONZALEZ: Object to form.</p> <p>18 THE WITNESS: There's a study that I'm</p> <p>19 thinking of that was done in the Army years ago that</p> <p>20 had soldiers exposed to -- it wasn't even weapon's</p> <p>21 fire. It was explosive fire -- with, again, degraded</p> <p>22 fit. And videos of seeing that the earplug was not a</p> <p>23 perfect fit and how it moved around as the explosion</p> <p>24 came. And then they immediately tested the hearing</p> <p>25 or these soldiers, and they did not have temporary or</p>
<p style="text-align: right;">Page 67</p> <p>1 MR. GONZALEZ: Objection, form.</p> <p>2 THE WITNESS: It depends on your</p> <p>3 hearing ability and their volume.</p> <p>4 Q. (BY MR. CICCONE) Colonel, the conversation</p> <p>5 that we're having now, can you give us the range of</p> <p>6 the approximately number of decibels that our voices</p> <p>7 are generating in this conversation?</p> <p>8 MR. GONZALEZ: Objection, form.</p> <p>9 THE WITNESS: I wish I could pull out</p> <p>10 my cell phone and do my little decibel level meter,</p> <p>11 but I would guess about 65 decibels.</p> <p>12 Q. (BY MR. CICCONE) Okay. And you said that</p> <p>13 the OSHA threshold is, what, 95 decibels?</p> <p>14 A. Ninety.</p> <p>15 Q. Ninety? And firearm is, what, 160 to 170?</p> <p>16 A. Depends on the firearm. I had said a</p> <p>17 firearm could be 120 to 170.</p> <p>18 Q. Colonel, does an earplug have to completely</p> <p>19 seal a person's ear canal in order to attenuate noise</p> <p>20 to a safe level?</p> <p>21 A. That's a complex question. It depends on</p> <p>22 the noise, but in general that's the purpose of the</p> <p>23 earplug is to obtain a seal to block a sound.</p> <p>24 Q. Well, for example, with respect to a very</p> <p>25 high noise level, for example a firearm at 160</p>	<p style="text-align: right;">Page 69</p> <p>1 permanent hearing loss.</p> <p>2 Q. (BY MR. CICCONE) Was this a controlled</p> <p>3 experiment?</p> <p>4 A. It was, yes.</p> <p>5 Q. So they intentionally exposed soldiers to a</p> <p>6 potentially dangerous sound level to determine how</p> <p>7 much attenuation the improperly fitted plugs were</p> <p>8 giving them?</p> <p>9 A. This was before a lot of the protections</p> <p>10 these days. This was back in the '60s.</p> <p>11 But they had done some work ahead of</p> <p>12 time, some pilot work, to determine that the soldiers</p> <p>13 would only get temporary hearing loss, if they got</p> <p>14 any. And then they conducted this experiment and</p> <p>15 showed that didn't get even temporary, much less</p> <p>16 permanent hearing loss.</p> <p>17 Q. Do you know if those soldiers were followed</p> <p>18 later in life to determine whether or not they were</p> <p>19 experiencing hearing loss later on?</p> <p>20 A. I do not know.</p> <p>21 Q. Okay. Do you think that today that the</p> <p>22 military would attempt to conduct that kind of</p> <p>23 experiment on its personnel?</p> <p>24 MR. GONZALEZ: Objection, form.</p> <p>25 THE WITNESS: Not under current IRB</p>

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<p>1 standards.</p> <p>2 Q. (BY MR. CICCONE) "IRB" means what?</p> <p>3 A. Institutional Review Board, it's the</p> <p>4 research approval process.</p> <p>5 Q. Colonel, in The Hearing Conservation</p> <p>6 Manual, this is chapter 13 that you co-authored. On</p> <p>7 page 114 you include a section on dual protection,</p> <p>8 dual protection or double protection.</p> <p>9 And tell me what that refers to dual</p> <p>10 protection or double protection.</p> <p>11 A. Those terms are often used interchangeably,</p> <p>12 and mean using two types of hearing protection, most</p> <p>13 commonly an earplug and an earmuff.</p> <p>14 Q. And you say in this article that, "Dual</p> <p>15 protection can be helpful in very high noise levels</p> <p>16 above 105 decibels." Do you remember writing that?</p> <p>17 A. Yes.</p> <p>18 Q. Okay. I think you described earlier that</p> <p>19 our speech is in the relative low decibel range. You</p> <p>20 said that the OSHA level was about 90, and you talked</p> <p>21 about firearms could from 120 up to, say, 170?</p> <p>22 A. You've moved from continuous noise to</p> <p>23 impulse noise in that question that you just gave.</p> <p>24 So just to clarify, our speech is</p> <p>25 measured on the continuous noise scale at 65 dB. The</p>	<p>1 A. Decibels are measures on a logarithmic</p> <p>2 scale, so think exponents not going up additively but</p> <p>3 exponentially. If you have a continuous noise of 90</p> <p>4 dB, and another continuous noise of 90 dB right next</p> <p>5 to it, two machines, your resulting noise is not 180</p> <p>6 dB, it's 93 dB. And that 3 dB additive is a doubling</p> <p>7 of the energy.</p> <p>8 Q. Okay. And what I'm interested in knowing</p> <p>9 in particular is, say, I've got two hearing</p> <p>10 protection devices. For example, the Shooter's</p> <p>11 earplugs that are at issue in this case that are</p> <p>12 rated at 33 NRR. And then we've got these Lightning</p> <p>13 L3 earmuffs that are rated -- I think they're at 30</p> <p>14 dB NRR?</p> <p>15 A. Right on top.</p> <p>16 Q. Yes, 30 dB and NRR. I want you to explain</p> <p>17 to me if you can, if I wear the earplugs and the</p> <p>18 earmuffs together, in other words, dual hearing</p> <p>19 protection, can I expect a noise reduction rating of</p> <p>20 63? That would be adding the two sums together.</p> <p>21 A. No, sir.</p> <p>22 Q. Okay. Colonel, approximately how would you</p> <p>23 determine what the attenuation is by wearing the dual</p> <p>24 protectors?</p> <p>25 A. The method to determine the amount for dual</p>
Page 71	Page 73
<p>1 OSHA standard is saying you can only be permitted to</p> <p>2 90 decibel continuous noise are lower for an 8-hour</p> <p>3 period.</p> <p>4 And now you've just move to impulse</p> <p>5 noise which has a different permissible exposure</p> <p>6 level, and a different way of measuring. It's in dB</p> <p>7 peak versus dBA.</p> <p>8 Q. Okay. But is it your conclusion in this</p> <p>9 article that "Double hearing protection can protect a</p> <p>10 person for exposure to continuous noise above 105</p> <p>11 decibels"?</p> <p>12 A. Yes, sir.</p> <p>13 Q. Okay. Is it your opinion, Colonel, that</p> <p>14 double hearing protection can also protect someone</p> <p>15 from exposure to impulse noise?</p> <p>16 A. It can.</p> <p>17 Q. Okay. And, for example, would it protect</p> <p>18 somebody from impulse noise such as impulse noise</p> <p>19 that could be generated by a firearm?</p> <p>20 A. It can.</p> <p>21 Q. Colonel, does wearing double hearing</p> <p>22 protection, for example, the earmuffs and the</p> <p>23 earplugs, does it double the attenuation of the noise</p> <p>24 or is there some formula to determine what the</p> <p>25 attenuation is?</p>	<p>1 protection is in your example to know how much you're</p> <p>2 getting from the earplug, which in this case is a</p> <p>3 noise rating of 33. If indeed you are getting 33</p> <p>4 from it, and you added muffs on top of it, you can</p> <p>5 add about 5 dB. And that's a good rule of thumb that</p> <p>6 OSHA recommends for double protection.</p> <p>7 Q. Okay. So I take the 33 from -- for</p> <p>8 example, the Shooter's earplugs that are rated at 33</p> <p>9 NRR and then add 5 to that?</p> <p>10 A. Yes.</p> <p>11 Q. So that would be an approximate noise</p> <p>12 reduction rating of, say, 38?</p> <p>13 A. Yes, sir.</p> <p>14 Q. Am I right?</p> <p>15 Okay. And that's assuming that I'm</p> <p>16 wearing the plugs correctly; is that correct?</p> <p>17 A. Yes.</p> <p>18 Q. And if I'm not wearing the plugs correctly,</p> <p>19 does that formula is it accurate, or would it</p> <p>20 accurately effect what the noise reduction rating</p> <p>21 would be?</p> <p>22 A. The rating would change depending on the</p> <p>23 properness of either of the hearing protectors.</p> <p>24 Q. Would it go up or down?</p> <p>25 A. It depends on how you're wearing it. It</p>

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<p style="text-align: right;">Page 74</p> <p>1 would likely go down if you weren't wearing it</p> <p>2 properly.</p> <p>3 Q. Now, Colonel, are you familiar with the</p> <p>4 notion that the use of double hearing protection from</p> <p>5 the earmuffs and earplugs can provide a person who is</p> <p>6 exposed to firearm noise with more protection than</p> <p>7 the use of a single device alone? Are you familiar</p> <p>8 at all with that notion?</p> <p>9 A. That notion is recommended by NIOSH, yes.</p> <p>10 Q. Okay. And I wanted to ask you that. We've</p> <p>11 got a number of papers that I want to very briefly go</p> <p>12 through. The first one is a -- it's a 2008 paper by</p> <p>13 William Murphy, and that's titled "Assessment of</p> <p>14 Noise Exposure for Indoor and Outdoor Firing Ranges".</p> <p>15 First of all, are you familiar with</p> <p>16 the paper?</p> <p>17 A. Yes.</p> <p>18 MR. GONZALEZ: Counsel, you're going</p> <p>19 to mark each one, right?</p> <p>20 MR. CICCONE: No. I didn't mark</p> <p>21 the -- I will if you want me to.</p> <p>22 MR. GONZALEZ: Just so we have a</p> <p>23 record of -- as you're going along.</p> <p>24 MR. CICCONE: I can. They're all on</p> <p>25 the thumb drive that I gave you. I was trying to</p>	<p style="text-align: right;">Page 76</p> <p>1 I worked at the Pittsburgh office, but we did work</p> <p>2 together, yes.</p> <p>3 Q. Okay. So in other words, you were</p> <p>4 professional colleagues?</p> <p>5 A. Yes, sir.</p> <p>6 Q. Okay. I want you to take a look at the</p> <p>7 articles and let me ask you a question about it.</p> <p>8 A. (Reading.)</p> <p>9 Okay.</p> <p>10 Q. Colonel, what I have done is I have</p> <p>11 highlighted a couple of things in this article, just</p> <p>12 to draw your attention to them. And am I correct</p> <p>13 that what Murphy was investigating was noise exposure</p> <p>14 to firearm's noise by law enforcement officers. Is</p> <p>15 that your understanding of what the context of the</p> <p>16 paper was?</p> <p>17 A. I believe it was.</p> <p>18 Q. I think they were SWAT team members, if I'm</p> <p>19 remembering correctly. And one of the things he</p> <p>20 says -- and let me direct your attention to -- it's</p> <p>21 on page 696. And apparently what they did, the</p> <p>22 officers were wearing earmuffs and then they gave</p> <p>23 them earplugs to wear with the earmuffs and Murphy</p> <p>24 concludes, those peak reduction results along with</p> <p>25 the peak noise level measured for the weapons,</p>
<p style="text-align: right;">Page 75</p> <p>1 avoid attaching all of those to the deposition, just</p> <p>2 because of the volume, but I will if you want to.</p> <p>3 (Exhibit 19 marked)</p> <p>4 Q. (BY MR. CICCONE) Okay. Colonel, Exhibit</p> <p>5 No. 19 is a copy of Murphy's article. Have you ever</p> <p>6 seen the article before?</p> <p>7 A. Let me look at it. Bill Murphy is a</p> <p>8 prolific researcher, so he's written a lot of</p> <p>9 articles.</p> <p>10 Q. Yeah. While you're looking through it, I</p> <p>11 wanted to ask you about that. When you say "Murphy</p> <p>12 is a prolific researcher," he has written a lot of</p> <p>13 articles in this community, has he not?</p> <p>14 A. He has.</p> <p>15 Q. And, in fact, you've coauthored some</p> <p>16 articles with him, have you not?</p> <p>17 A. I have.</p> <p>18 Q. Okay. Do you know him personally?</p> <p>19 A. I do.</p> <p>20 Q. Is this somebody you could call if you</p> <p>21 wanted to and talk to him about some issue that you</p> <p>22 were concerned about?</p> <p>23 A. Yes, sir.</p> <p>24 Q. And did y'all work at NIOSH together?</p> <p>25 A. Yes. He worked at the Cincinnati office and</p>	<p style="text-align: right;">Page 77</p> <p>1 indicate that the officers should consider using dual</p> <p>2 hearing protection during weapons training exercises.</p> <p>3 And then he continues on with his</p> <p>4 recommendations. "Dual hearing protection provides</p> <p>5 maximum peak level reduction, greater than 40</p> <p>6 decibels for the purpose of reducing impulsive noise</p> <p>7 due to small arms firing. Use of double protection,</p> <p>8 can minimize the potential risk of improper fitting</p> <p>9 of earplugs."</p> <p>10 Did you understand what I just read?</p> <p>11 A. Yes, sir.</p> <p>12 Q. Okay. That last -- that recommendation,</p> <p>13 "use of double protection can minimize the risk --</p> <p>14 the potential risk of improper fitting of earplugs."</p> <p>15 Do you agree with that recommendation?</p> <p>16 MR. GONZALEZ: Objection, form.</p> <p>17 THE WITNESS: Yes, sir.</p> <p>18 Q. (BY MR. CICCONE) Okay. And tell me about</p> <p>19 this potential risk of improper fitting of earplugs.</p> <p>20 What's Murphy talking about in this article, if you</p> <p>21 know?</p> <p>22 MR. GONZALEZ: Objection, form.</p> <p>23 THE WITNESS: Well, it seems fairly</p> <p>24 clear. Actually, let me look at his words because</p> <p>25 they seemed quite clear to me. Is that if you</p>

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78 to 81

<p style="text-align: right;">Page 78</p> <p>1 weren't wearing the earplug correctly, you have a</p> <p>2 backup of wearing the earmuff correctly.</p> <p>3 Q. (BY MR. CICCONE) When he talks about this</p> <p>4 potential risk of improperly fitted earplugs, do you</p> <p>5 see where he wrote that?</p> <p>6 A. Yes. Double protection minimizes that</p> <p>7 potential risk.</p> <p>8 Q. Okay. What potential risk is he talking</p> <p>9 about?</p> <p>10 MR. GONZALEZ: Objection, form.</p> <p>11 THE WITNESS: I'm guessing the</p> <p>12 potential risk he's referring to -- and, again, I</p> <p>13 would need to read through the whole article to make</p> <p>14 sure I'm understanding it.</p> <p>15 Q. (BY MR. CICCONE) Of course, of course.</p> <p>16 A. But the potential risk would be if you</p> <p>17 didn't fit the earplug right, you have a backup of</p> <p>18 fitting the earmuff correctly.</p> <p>19 Q. Okay. But a risk of what, noise induced</p> <p>20 hearing loss?</p> <p>21 MR. GONZALEZ: Objection, form.</p> <p>22 THE WITNESS: Yes, sir.</p> <p>23 Q. (BY MR. CICCONE) Okay. So do you</p> <p>24 understand Murphy to be saying that there is a</p> <p>25 potential risk of noise induced hearing loss if the</p>	<p style="text-align: right;">Page 80</p> <p>1 you first read Murphy's paper?</p> <p>2 MR. GONZALEZ: Object, form.</p> <p>3 THE WITNESS: Possibly the -- in 2008.</p> <p>4 Q. (BY MR. CICCONE) Okay. About the time that</p> <p>5 he published it?</p> <p>6 A. Probably, yes.</p> <p>7 Q. Okay. And, Colonel, at that time were you</p> <p>8 working for Sperian?</p> <p>9 A. Yes, by that time I was.</p> <p>10 Q. Okay. And you were a hearing conservation</p> <p>11 manager for Sperian when you read that paper?</p> <p>12 A. Possibly.</p> <p>13 Q. Do you recall discussing Murphy's paper,</p> <p>14 Murphy's recommendation with any of your colleagues</p> <p>15 at Sperian?</p> <p>16 MR. GONZALEZ: Objection, form.</p> <p>17 A. Not specifically.</p> <p>18 Q. (BY MR. CICCONE) Do you remember discussing</p> <p>19 it in general?</p> <p>20 MR. GONZALEZ: Object to form.</p> <p>21 THE WITNESS: Not specifically.</p> <p>22 Q. (BY MR. CICCONE) Do you believe or have</p> <p>23 reason to believe that your colleagues at Sperian</p> <p>24 were aware of Murphy's paper and his recommendations?</p> <p>25 MR. GONZALEZ: Objection, form.</p>
<p style="text-align: right;">Page 79</p> <p>1 plugs don't fit correctly?</p> <p>2 MR. GONZALEZ: Objection, form.</p> <p>3 THE WITNESS: Yes, sir.</p> <p>4 Q. (BY MR. CICCONE) Do you agree with that?</p> <p>5 MR. GONZALEZ: Object to form.</p> <p>6 THE WITNESS: Yes, sir.</p> <p>7 Q. (BY MR. CICCONE) Okay. And this potential</p> <p>8 risk that Murphy talks about in his 2008 article,</p> <p>9 Colonel, do you believe that that potential risk is</p> <p>10 one that the hearing conservation community is aware</p> <p>11 of?</p> <p>12 MR. GONZALEZ: Objection, form.</p> <p>13 THE WITNESS: Certainly.</p> <p>14 Q. (BY MR. CICCONE) And, Colonel, do you agree</p> <p>15 that the hearing industry is also aware of the</p> <p>16 potential risk that Murphy describes?</p> <p>17 MR. GONZALEZ: Objection, form.</p> <p>18 THE WITNESS: The potential risk of</p> <p>19 improper fit?</p> <p>20 Q. (BY MR. CICCONE) The potential risk of</p> <p>21 noise induced hearing loss from an improper fit of an</p> <p>22 earplug?</p> <p>23 MR. GONZALEZ: Objection, form.</p> <p>24 THE WITNESS: Yes.</p> <p>25 Q. (BY MR. CICCONE) Colonel, when do you think</p>	<p style="text-align: right;">Page 81</p> <p>1 THE WITNESS: I can't recall that.</p> <p>2 Q. (BY MR. CICCONE) The next paper I want to</p> <p>3 talk to you about, Colonel, is a 2009 NIOSH alert.</p> <p>4 We're going to go ahead and mark it. This is going</p> <p>5 to be No. 20.</p> <p>6 MR. GONZALEZ: Did you say 2009?</p> <p>7 MR. CICCONE: 2009.</p> <p>8 (Exhibit 20 marked)</p> <p>9 Q. (BY MR. CICCONE) And, Colonel, have you</p> <p>10 ever seen the 2009 NIOSH alert?</p> <p>11 A. Yes.</p> <p>12 Q. When do you recall first seeing it?</p> <p>13 MR. GONZALEZ: Object to form.</p> <p>14 THE WITNESS: Again, probably shortly</p> <p>15 after publication.</p> <p>16 Q. (BY MR. CICCONE) So that would have been</p> <p>17 approximately 2009?</p> <p>18 A. Yes, sir.</p> <p>19 Q. Okay. And the title of the publication is,</p> <p>20 "Preventing Occupational Exposures to Lead and</p> <p>21 Indoor -- and Noise at Indoor Firing Ranges". Is</p> <p>22 that the title?</p> <p>23 A. Yes, sir.</p> <p>24 Q. Okay. And, Colonel, let me direct your</p> <p>25 attention to page 19. Let me see if I can find if I</p>

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82 to 85

<p style="text-align: right;">Page 82</p> <p>1 tagged it for you. Page 19 of the NIOSH alert</p> <p>2 states, "All workers and shooters should be required</p> <p>3 to use dual hearing protection devices (earmuffs and</p> <p>4 earplugs) when the range is in use."</p> <p>5 Did I read that correctly?</p> <p>6 A. I don't know. I can't see that far, sorry.</p> <p>7 It looks like you did, yes.</p> <p>8 Q. Okay. And are there different kinds of</p> <p>9 NIOSH publications? For example, this one is called</p> <p>10 an alert. Is there a difference between an alert and</p> <p>11 some other kind of publication?</p> <p>12 A. There likely is, and I'm not the expert in</p> <p>13 their various kind of communications. But it appears</p> <p>14 this was a result of what was called a health hazard</p> <p>15 evaluation, where someone has requested that NIOSH</p> <p>16 come in and do an assessment, in this case for lead</p> <p>17 exposure and noise exposure in an indoor firing</p> <p>18 range.</p> <p>19 Q. Did you play role at all in the NIOSH</p> <p>20 investigation or assessment of that condition?</p> <p>21 A. No, sir.</p> <p>22 Q. Okay. You never talked to anybody about</p> <p>23 the investigation or provided any input whatsoever?</p> <p>24 A. No, sir.</p> <p>25 Q. Okay. Were you aware that the</p>	<p style="text-align: right;">Page 84</p> <p>1 agree with that statement. A shooter could very well</p> <p>2 be safe by wearing earplugs.</p> <p>3 Q. (BY MR. CICCONE) Well, if that's true,</p> <p>4 Colonel, then why would NIOSH require that employees</p> <p>5 and shooters wear dual hearing protection?</p> <p>6 MR. GONZALEZ: Objection, form.</p> <p>7 THE WITNESS: For the employer to</p> <p>8 protect themselves. They're supposed to be</p> <p>9 protecting their employees, and that's their</p> <p>10 requirement. And so passing that on to the employees</p> <p>11 to wear their PPE, wear double PPE, is probably why</p> <p>12 "required" is used there.</p> <p>13 Q. (BY MR. CICCONE) Okay. I didn't quite</p> <p>14 understand who you think is being protected. Is it</p> <p>15 the employer that's being protected, or the employee</p> <p>16 that's actually exposed to the impulsive noise on the</p> <p>17 firing range?</p> <p>18 A. Yes, both. The employer is required to</p> <p>19 protect their employee. And so in order to protect</p> <p>20 themselves as an employer and say, yes, I am</p> <p>21 protecting my employees, they have safety rules that</p> <p>22 say you need to wear double protection to make sure</p> <p>23 that their employees are safe.</p> <p>24 Q. Did you discuss that alert with any of your</p> <p>25 colleagues at Sperian?</p>
<p style="text-align: right;">Page 83</p> <p>1 investigation was underway?</p> <p>2 A. No, sir.</p> <p>3 Q. Okay. And the line that I read that, "All</p> <p>4 workers and shooters should be required to wear dual</p> <p>5 hearing protection devices," what significance, if</p> <p>6 any, do you attach to the word "required"?</p> <p>7 MR. GONZALEZ: Objection, form.</p> <p>8 THE WITNESS: My guess in this context</p> <p>9 is that it is advising the employer, in this case I</p> <p>10 assume the range operator, that that would be a good</p> <p>11 policy, a policy recommendation to have.</p> <p>12 Q. (BY MR. CICCONE) But the question is: Why</p> <p>13 would NIOSH suggest that employers require workers</p> <p>14 and shooters to wear dual protection, as opposed to</p> <p>15 simply giving them an option to do so?</p> <p>16 MR. GONZALEZ: Object to form.</p> <p>17 THE WITNESS: Employers are required</p> <p>18 by law to keep their employees safe, and so most</p> <p>19 safety standards have requirements for personal</p> <p>20 protective equipment.</p> <p>21 Q. (BY MR. CICCONE) Would a shooter not be</p> <p>22 safe by simply wearing earplugs?</p> <p>23 MR. GONZALEZ: Object to form.</p> <p>24 THE WITNESS: The way you state that,</p> <p>25 "Would a shooter not be safe," that's not -- I don't</p>	<p style="text-align: right;">Page 85</p> <p>1 A. I can't say that I did.</p> <p>2 MR. GONZALEZ: Object to form.</p> <p>3 Q. (BY MR. CICCONE) Do you know if any of your</p> <p>4 colleagues at Sperian had a copy of this alert?</p> <p>5 MR. GONZALEZ: Object to form.</p> <p>6 THE WITNESS: I don't know.</p> <p>7 Q. (BY MR. CICCONE) Do you recall discussing</p> <p>8 the alert with any of your colleagues at Sperian with</p> <p>9 regard to selling earplugs to people that they knew</p> <p>10 would be in a shooting range?</p> <p>11 MR. GONZALEZ: Object, form.</p> <p>12 THE WITNESS: No, sir.</p> <p>13 Q. (BY MR. CICCONE) Okay. But I thought you</p> <p>14 were a hearing conservative manager there --</p> <p>15 A. Yes, sir.</p> <p>16 Q. -- whose role was to try to educate people</p> <p>17 on the safe use of hearing protectors.</p> <p>18 And explain to me, if that was your</p> <p>19 role at Sperian and if you knew that Sperian was</p> <p>20 selling these earplugs, well tell me why you would</p> <p>21 not have communicated to Sperian NIOSH's alert that</p> <p>22 workers and shooters should be required to wear</p> <p>23 double hearing protection. Why wouldn't you have</p> <p>24 done that?</p> <p>25 MR. GONZALEZ: Objection, form.</p>

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86 to 89

<p style="text-align: right;">Page 86</p> <p>1 THE WITNESS: Because that's a -- that</p> <p>2 was from a health hazard assessment for a specific</p> <p>3 environment. So I'm not sure why I would -- what</p> <p>4 would be gained for me to be required to say that</p> <p>5 specific thing. I don't know.</p> <p>6 I don't see that as -- it has an alert</p> <p>7 on it, but it doesn't seem like an alarmist thing for</p> <p>8 NIOSH to recommend to people to be extra safe.</p> <p>9 MR. CICCONE: Colonel, there's a 2010</p> <p>10 NIOSH paper. Let's me go ahead and mark this one as</p> <p>11 Exhibit No. 21.</p> <p>12 (Exhibit 21 marked)</p> <p>13 Q. (BY MR. CICCONE) This is a January 2010</p> <p>14 publication that was authored by...</p> <p>15 A. Yeah, sometimes the NIOSH documents don't</p> <p>16 have authors.</p> <p>17 Q. No, this one does. And it's -- This</p> <p>18 document was prepared by a gentleman named Kardous,</p> <p>19 K-A-R-D-O-U-S. Do you know that gentleman?</p> <p>20 A. I do know him.</p> <p>21 Q. Okay. Is he an audiologist, a hearing</p> <p>22 conservation specialist like you are?</p> <p>23 A. He's an industrial hygienist, I believe.</p> <p>24 Q. Okay. But in any event, do you know if he</p> <p>25 works for NIOSH or did at that time?</p>	<p style="text-align: right;">Page 88</p> <p>1 MR. GONZALEZ: Objection, form.</p> <p>2 THE WITNESS: Again, just to ensure</p> <p>3 safety. My guess is that document is a sequella of</p> <p>4 the document that you talked about before. It's</p> <p>5 taking it into a different format.</p> <p>6 Q. (BY MR. CICCONE) Right. It's about a year</p> <p>7 apart or so.</p> <p>8 Okay. Colonel, do you remember the</p> <p>9 first time you ever saw this document?</p> <p>10 A. I, frankly, don't remember seeing that</p> <p>11 document.</p> <p>12 MR. GONZALEZ: Exhibit 21?</p> <p>13 MR. CICCONE: 21.</p> <p>14 THE WITNESS: 21.</p> <p>15 Q. (BY MR. CICCONE) Colonel, there was a 2010</p> <p>16 conference that was in Orlando, Florida that was in</p> <p>17 February of 2010, and it was put on by The National</p> <p>18 Hearing Conservation Association. Were you the</p> <p>19 president of that association at the time that that</p> <p>20 conference was put on?</p> <p>21 A. 2010, I don't think so.</p> <p>22 Q. Okay. But you were certainly a member?</p> <p>23 A. Yes.</p> <p>24 Q. Okay. Do you remember attending that</p> <p>25 conference?</p>
<p style="text-align: right;">Page 87</p> <p>1 A. He did.</p> <p>2 Q. And the title to this workplace solutions</p> <p>3 document is, "Reducing Exposure to Lead and Noise at</p> <p>4 Indoor Firing Ranges". Do you see where I've read</p> <p>5 that?</p> <p>6 A. Yes.</p> <p>7 Q. And then it's on -- the second page of the</p> <p>8 publication, the recommendation. He writes, "Workers</p> <p>9 and shooters at firing ranges should take the</p> <p>10 following steps to protect themselves," and then he</p> <p>11 lists, "use double hearing protection, earplugs, and</p> <p>12 earmuffs." Do you see where I've read that?</p> <p>13 A. I do.</p> <p>14 Q. Okay. And do you think that's -- that's</p> <p>15 good advice that shooters on indoor ranges should</p> <p>16 protect themselves by wearing dual protection?</p> <p>17 A. That is good advice.</p> <p>18 Q. Would that be your recommendation to</p> <p>19 somebody going on to an indoor shooting range to wear</p> <p>20 double hearing protection?</p> <p>21 MR. GONZALEZ: Objection, form.</p> <p>22 THE WITNESS: Yes.</p> <p>23 Q. (BY MR. CICCONE) Okay. And tell me why</p> <p>24 would you recommend that somebody wear double hearing</p> <p>25 protection on an indoor shooting range?</p>	<p style="text-align: right;">Page 89</p> <p>1 A. Yes.</p> <p>2 Q. Did you speak at that conference?</p> <p>3 A. I don't remember that.</p> <p>4 (Exhibit 5 marked)</p> <p>5 Q. (BY MR. CICCONE) Okay. And there was a</p> <p>6 PowerPoint that was put on it, and it's labeled,</p> <p>7 "Howard Leight by Sperian," and we talked about</p> <p>8 Howard Leight being a trade name for the Sperian</p> <p>9 products, and then subsequently the Honeywell</p> <p>10 products; is that correct?</p> <p>11 A. Yes.</p> <p>12 Q. Okay. And this --</p> <p>13 A. That just reminded me, I did speak there.</p> <p>14 Q. Okay. What did you talk about?</p> <p>15 MR. DROOTMAN: Object to form.</p> <p>16 THE WITNESS: The title slide that you</p> <p>17 have there says, "Best Practices in Hearing</p> <p>18 Conservation."</p> <p>19 Q. (BY MR. CICCONE) You would have been the</p> <p>20 speaker?</p> <p>21 A. I think, yes.</p> <p>22 Q. Did you present a PowerPoint?</p> <p>23 A. I think I did, yes.</p> <p>24 Q. Okay. Because this -- these are a few</p> <p>25 pages from a much longer document that I'll have to</p>

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90 to 93

<p style="text-align: right;">Page 90</p> <p>1 produce later if it's not already on the thumb drive</p> <p>2 because it's -- it was too voluminous to try to</p> <p>3 include in the deposition, but I will if I have to</p> <p>4 later.</p> <p>5 A. Okay.</p> <p>6 Q. But, Colonel, one of the -- there's a</p> <p>7 number of pages that I've included in this exhibit.</p> <p>8 But the one that I want to draw your attention to is</p> <p>9 the page that's entitled, "Dual Protection". Do you</p> <p>10 see this page?</p> <p>11 A. I do.</p> <p>12 Q. Okay. And the text reads, "For extreme</p> <p>13 noise environment dual protection is often</p> <p>14 recommended." And, of course, you agree with that</p> <p>15 statement, do you not?</p> <p>16 A. I do.</p> <p>17 Q. Okay. And then it talks about estimating</p> <p>18 the protected noise level by adding the 5 decibels to</p> <p>19 the noise reduction rating for the highest rated</p> <p>20 hearing protection devices, which is what you</p> <p>21 explained earlier?</p> <p>22 A. Yes.</p> <p>23 Q. Okay. And then it gives the potential NRR,</p> <p>24 and it happens to be very close to the example that</p> <p>25 you and I had discussed earlier.</p>	<p style="text-align: right;">Page 92</p> <p>1 hearing conservation team worked at creating those</p> <p>2 slides together, so yes.</p> <p>3 Q. (BY MR. CICCONE) The reason I'm asking you</p> <p>4 these questions is that the earplugs that are in</p> <p>5 issue in this case -- and this is an exemplar box of</p> <p>6 these Shooters Earplugs that we've used in several of</p> <p>7 these depositions, and I've got some photographs that</p> <p>8 we'll refer to later and include in the transcript.</p> <p>9 But the text on the box says,</p> <p>10 "Shooters Earplugs, ideal for shooting sports."</p> <p>11 MR. GONZALEZ: The portions you read</p> <p>12 you're saying, right?</p> <p>13 MR. CICCONE: Yes.</p> <p>14 MR. GONZALEZ: Okay.</p> <p>15 THE WITNESS: I don't see where it</p> <p>16 says, "Ideal for shooting sports."</p> <p>17 Q. (BY MR. CICCONE) It's real -- It's right</p> <p>18 there, Colonel. It's the third line -- one, two,</p> <p>19 three.</p> <p>20 A. Yeah, down the bullet.</p> <p>21 Q. "Shooters Earplugs, ideal for shooting</p> <p>22 sports." And tell me, Colonel, are you familiar at</p> <p>23 all with that product?</p> <p>24 A. I am, yes.</p> <p>25 Q. Okay. And did you know when Honeywell</p>
<p style="text-align: right;">Page 91</p> <p>1 But my question is: That at least as</p> <p>2 of 2010, do you agree with me that Honeywell, your</p> <p>3 employer at that time on whose behalf you were</p> <p>4 speaking at this conference, was aware of the</p> <p>5 recommendation that dual hearing protection provided</p> <p>6 additional protection to somebody who was exposed to</p> <p>7 a high noise environment?</p> <p>8 MR. GONZALEZ: Objection, form.</p> <p>9 THE WITNESS: Yes.</p> <p>10 Q. (BY MR. CICCONE) Do you recall ever</p> <p>11 discussing that recommendation with any of your</p> <p>12 colleagues at Honeywell?</p> <p>13 MR. GONZALEZ: Objection, form.</p> <p>14 THE WITNESS: The recommendation for</p> <p>15 double protection in --</p> <p>16 Q. (BY MR. CICCONE) Yes.</p> <p>17 A. -- an extreme environment?</p> <p>18 Q. Yes.</p> <p>19 A. It was what we considered best practice.</p> <p>20 Q. Okay. But did you specifically discuss it</p> <p>21 with any of your colleagues at Honeywell that you can</p> <p>22 recall?</p> <p>23 MR. GONZALEZ: Objection, form.</p> <p>24 THE WITNESS: Well, again, discuss it</p> <p>25 in what kind of context? I mean, we -- we all as a</p>	<p style="text-align: right;">Page 93</p> <p>1 began to market that product?</p> <p>2 A. I do not. Most of the work that I did with</p> <p>3 Howard Leight/Honeywell was on the industrial side,</p> <p>4 teaching industrial hearing conservation customers,</p> <p>5 and this is a retail product.</p> <p>6 I was -- This was like a sister</p> <p>7 division in Honeywell. So, no, I don't know when it</p> <p>8 came into being.</p> <p>9 Q. Do you know if Sperian was selling that</p> <p>10 product when you worked with Sperian before Honeywell</p> <p>11 bought Sperian?</p> <p>12 MR. GONZALEZ: Object to form.</p> <p>13 THE WITNESS: I don't know the answer</p> <p>14 to that.</p> <p>15 Q. (BY MR. CICCONE) When is the first time</p> <p>16 that you think that you became aware that Honeywell</p> <p>17 was selling those Shooters Earplugs?</p> <p>18 MR. GONZALEZ: The ones that she's</p> <p>19 holding the case, right, that product?</p> <p>20 MR. CICCONE: Yes.</p> <p>21 THE WITNESS: When did I become aware</p> <p>22 that Honeywell was selling this? I would say</p> <p>23 sometime in the first year of my employment. So</p> <p>24 2008, 2009.</p> <p>25 Q. (BY MR. CICCONE) Okay. So I think you</p>

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<p style="text-align: right;">Page 94</p> <p>1 testified that you went to work for Sperian in 2008.</p> <p>2 A. Yes.</p> <p>3 Q. And I think we talked about Honeywell</p> <p>4 buying Sperian about 2010.</p> <p>5 A. Yes.</p> <p>6 Q. Okay. So do I understand that when you</p> <p>7 were working for Sperian, that you were aware that</p> <p>8 Sperian was selling the Shooters Earplugs that are --</p> <p>9 an exemplar box of which is there in your hand?</p> <p>10 A. It would not have been branded by Honeywell</p> <p>11 at the time.</p> <p>12 Q. Well, obviously.</p> <p>13 A. It would have said Sperian.</p> <p>14 Q. It probably would have said Howard Leight</p> <p>15 because that's the trademark?</p> <p>16 A. Yes.</p> <p>17 Q. Okay. Colonel, we talked about the Murphy</p> <p>18 paper, the NIOSH alert, the NIOSH paper. We've even</p> <p>19 talked about your PowerPoint all relating to dual</p> <p>20 hearing protection to protect somebody from impulsive</p> <p>21 noise from firearms.</p> <p>22 My question is: Did you ever talk to</p> <p>23 anybody at Sperian about selling Shooters Earplugs</p> <p>24 that are ideal for shooting sports when you knew that</p> <p>25 double hearing protection was recommended to protect</p>	<p style="text-align: right;">Page 96</p> <p>1 Hearing Conservation Association, or Murphy, or any</p> <p>2 of the other people that we've talked about</p> <p>3 recommending that dual hearing protection is</p> <p>4 necessary or required to protect somebody from</p> <p>5 firearm's noise in an indoor range?</p> <p>6 Does it say anything on the box about</p> <p>7 that?</p> <p>8 MR. GONZALEZ: Object to form.</p> <p>9 THE WITNESS: No.</p> <p>10 (Exhibit 6 marked)</p> <p>11 Q. (BY MR. CICCONE) Let me hand you Exhibit</p> <p>12 No. 6, Colonel, that I believe is a paper that you</p> <p>13 published in publication called Soldier</p> <p>14 Modernisation?</p> <p>15 A. Yes.</p> <p>16 Q. And I believe, Colonel, that you published</p> <p>17 this paper in 2013, and the title is, "New Research</p> <p>18 Shows Firearms Users How to Keep Their Hearing Safe."</p> <p>19 Do you remember publishing that paper?</p> <p>20 A. I do, yes.</p> <p>21 Q. And it's even got Honeywell's name on the</p> <p>22 first page?</p> <p>23 A. Yes, sir.</p> <p>24 Q. And when you published that paper,</p> <p>25 obviously, you were the hearing conservation manager</p>
<p style="text-align: right;">Page 95</p> <p>1 a shooter from impulsive noise from firearms?</p> <p>2 MR. GONZALEZ: Objection, form.</p> <p>3 THE WITNESS: Yeah. The way you asked</p> <p>4 the question, I'm not sure what you're getting at,</p> <p>5 but let me answer as best I can.</p> <p>6 The recommendations for double</p> <p>7 protection are, as we've spoken about, that sort of</p> <p>8 extra safety. A well-fit foam earplug is certainly</p> <p>9 adequate for most recreational firearms.</p> <p>10 Q. (BY MR. CICCONE) And, Colonel, we talked</p> <p>11 about this risk that an improperly properly earplug</p> <p>12 would not provide the attenuation that a properly fit</p> <p>13 earplug would provide.</p> <p>14 But do you see anything on the box</p> <p>15 that talks about the risks that an improperly fit</p> <p>16 earplug will not provide the required attenuation?</p> <p>17 A. There's information, a caution on the back</p> <p>18 of the box.</p> <p>19 Q. Right. And it does say that it's 33 NR if</p> <p>20 properly worn or if used properly or something along</p> <p>21 those lines?</p> <p>22 A. Something along those lines.</p> <p>23 Q. But the question really is, Colonel, if the</p> <p>24 box says, "Shooters Earplugs, ideal for shooting</p> <p>25 sports," does it say anything about NIOSH, or the</p>	<p style="text-align: right;">Page 97</p> <p>1 for Honeywell?</p> <p>2 A. Yes.</p> <p>3 Q. Okay. So, obviously, Honeywell was aware</p> <p>4 of what you were doing and what papers you were</p> <p>5 publishing?</p> <p>6 A. Yes.</p> <p>7 Q. Did somebody have to review that paper and</p> <p>8 approve it before you submitted it for publication?</p> <p>9 A. Yes.</p> <p>10 Q. Who would that have been?</p> <p>11 A. A marketing person at the time, and I don't</p> <p>12 remember who it was.</p> <p>13 Q. How many marketing people would Honeywell</p> <p>14 have had that would have had to review your work?</p> <p>15 MR. GONZALEZ: Object to form.</p> <p>16 THE WITNESS: At that time?</p> <p>17 Q. (BY MR. CICCONE) Yes. This is 2013.</p> <p>18 THE WITNESS: Yeah.</p> <p>19 MR. GONZALEZ: Object to form.</p> <p>20 THE WITNESS: There was usually one</p> <p>21 marketing person who reviewed. But that marketing</p> <p>22 person changed over time.</p> <p>23 Q. (BY MR. CICCONE) Why would a marketing</p> <p>24 person at Honeywell have to review a paper that you</p> <p>25 would have submitted for publication on hearing</p>

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<p style="text-align: right;">Page 98</p> <p>1 protection?</p> <p>2 MR. GONZALEZ: Object to form.</p> <p>3 THE WITNESS: Honeywell's policy is</p> <p>4 anytime they publish things, the marketing people</p> <p>5 have to review it, the lawyers have to review it.</p> <p>6 They have a process.</p> <p>7 Q. (BY MR. CICCONE) Did you get any feedback</p> <p>8 from the marketing person about the content of the</p> <p>9 article that you proposed to submit for publication?</p> <p>10 MR. GONZALEZ: Object to form.</p> <p>11 THE WITNESS: I do not recall</p> <p>12 specifically, but likely, the marketing people often</p> <p>13 did helpful edits of just the grammatical corrections</p> <p>14 and things like that.</p> <p>15 Q. (BY MR. CICCONE) And I noticed that your</p> <p>16 coauthor was William Murphy?</p> <p>17 A. Yes, sir.</p> <p>18 Q. And Murphy is the gentleman whom we</p> <p>19 described earlier, has published a lot of things, and</p> <p>20 he was at NIOSH, and he probably still is?</p> <p>21 A. Yes.</p> <p>22 Q. Do you know if Murphy is still working, or</p> <p>23 is he retired?</p> <p>24 A. He's still there.</p> <p>25 Q. And, Colonel, one of the things that you</p>	<p style="text-align: right;">Page 100</p> <p>1 A. And I'm citing their recommendation.</p> <p>2 Q. And you sure are. And that would have been</p> <p>3 about, oh, five years after Murphy published the</p> <p>4 paper that you and I have discussed earlier where he</p> <p>5 had investigated the SWAT team and the exposure to</p> <p>6 the firearms noise, and was recommending double</p> <p>7 hearing protection in 2008. Am I right or wrong?</p> <p>8 A. That's correct.</p> <p>9 Q. So is there any dispute that Honeywell was</p> <p>10 aware, at least as of 2013, that NIOSH was</p> <p>11 recommending double hearing protection to protect</p> <p>12 shooters from firearms noise on indoor ranges?</p> <p>13 MR. GONZALEZ: Object to form.</p> <p>14 THE WITNESS: So the form you ask, is</p> <p>15 Honeywell aware? You know, Honeywell is a big</p> <p>16 company. So yes, we -- yes.</p> <p>17 Q. (BY MR. CICCONE) Well, you were certainly</p> <p>18 aware?</p> <p>19 A. I was aware. I was.</p> <p>20 Q. And you worked with Honeywell at the time?</p> <p>21 A. Yes, yes.</p> <p>22 Q. And this marketing person, and whatever</p> <p>23 lawyer --</p> <p>24 A. Other people.</p> <p>25 Q. -- reviewed that publication, you agree</p>
<p style="text-align: right;">Page 99</p> <p>1 say in this paper is that NIOSH recently published</p> <p>2 recommendations to reduce exposure to both lead and</p> <p>3 noise, and then you cite the paper. They recommend</p> <p>4 using both earplugs and earmuffs as double protection</p> <p>5 to keep peak exposure levels below 140 decibels in</p> <p>6 eight-hour time weighted average below 85 decibels.</p> <p>7 And then it goes on.</p> <p>8 Do you remember writing that?</p> <p>9 A. Yes.</p> <p>10 Q. And when you wrote that and published that</p> <p>11 article in 2013, that would have been approximately</p> <p>12 four years after the NIOSH alert came out in 2009</p> <p>13 requiring -- or recommending that employers require</p> <p>14 that workers and shooters wear double hearing</p> <p>15 protection?</p> <p>16 A. And let me clarify where you corrected</p> <p>17 yourself and said not requiring. NIOSH can't require</p> <p>18 anything --</p> <p>19 Q. They can recommend?</p> <p>20 A. -- but they can recommend.</p> <p>21 Q. They can recommend that employers require</p> <p>22 it?</p> <p>23 A. Yes.</p> <p>24 Q. But when you wrote this paper, it was about</p> <p>25 four years after that alert had come out?</p>	<p style="text-align: right;">Page 101</p> <p>1 they were certainly aware?</p> <p>2 A. Yes.</p> <p>3 MR. GONZALEZ: Object to form.</p> <p>4 Q. (BY MR. CICCONE) Colonel, let's -- the next</p> <p>5 paper I want to discuss with you, it's a 2017 paper.</p> <p>6 Let me mark this one.</p> <p>7 MR. CICCONE: We're at Exhibit No. 22.</p> <p>8 (Exhibit 22 marked)</p> <p>9 Q. (BY MR. CICCONE) And this is a NHCA, that's</p> <p>10 the National Hearing Conservation Association, right?</p> <p>11 A. Yes.</p> <p>12 Q. And we've discussed that organization, and</p> <p>13 you've been president. And you've been a member for</p> <p>14 30 years, right?</p> <p>15 And this is a position paper on</p> <p>16 recreational firearms noise. Have you ever seen that</p> <p>17 paper before?</p> <p>18 A. I have seen it.</p> <p>19 Q. And it was published March 16 of 2017?</p> <p>20 A. Yes.</p> <p>21 Q. Okay. When was the first time that you can</p> <p>22 remember seeing it?</p> <p>23 A. Probably shortly after its publication.</p> <p>24 Q. And some of the authors include Michael</p> <p>25 Steward, Deanna Meinke, M-E-I-N-K-E, a William</p>

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102 to 105

<p style="text-align: right;">Page 102</p> <p>1 Murphy.</p> <p>2 Okay. Do you know Steward or Meinke?</p> <p>3 A. I do.</p> <p>4 Q. Are these people that are part of this</p> <p>5 hearing conservation community --</p> <p>6 A. They are.</p> <p>7 Q. -- that you're a member of?</p> <p>8 Okay. And are they widely published,</p> <p>9 widely known within the community --</p> <p>10 A. They are.</p> <p>11 Q. -- that you're in?</p> <p>12 And one of the things that they say --</p> <p>13 this is going to be on page 5, where they say, "Dual</p> <p>14 hearing protection, earplugs plus earmuffs, will</p> <p>15 provide the greatest protection."</p> <p>16 Do you see where I read that?</p> <p>17 A. Yes.</p> <p>18 Q. Do you agree with that statement?</p> <p>19 A. Yes.</p> <p>20 Q. And it's not could provide, may provide,</p> <p>21 but it says, "it will provide the greatest</p> <p>22 protection." Do you agree?</p> <p>23 MR. GONZALEZ: Object to form.</p> <p>24 THE WITNESS: I might edit to say</p> <p>25 "could", but it's their paper.</p>	<p style="text-align: right;">Page 104</p> <p>1 again, and a number of other people that -- can I</p> <p>2 presume that you know all these people, or you</p> <p>3 associated with them at different times in your</p> <p>4 career?</p> <p>5 A. I know all except the last one.</p> <p>6 And, yes, that's who we referred to as</p> <p>7 a Rudyard gang in that other article that I wrote.</p> <p>8 Q. The Rudger gang?</p> <p>9 A. Yes.</p> <p>10 Q. How do you spell that?</p> <p>11 A. R-U-D-Y-A-R-D.</p> <p>12 Q. Rudyard?</p> <p>13 A. Rudyard, Michigan. They actually go to</p> <p>14 Rudyard, Michigan to do research on these firearm</p> <p>15 exposures.</p> <p>16 Q. Who does that research there?</p> <p>17 A. That group of people that I cite in the</p> <p>18 articles.</p> <p>19 Q. Do you know who sponsors that research?</p> <p>20 MR. GONZALEZ: Object to form.</p> <p>21 THE WITNESS: I -- I -- in the --</p> <p>22 "sponsor" can mean a lot of different things --</p> <p>23 Q. (BY MR. CICCONE) Who pays for that</p> <p>24 research?</p> <p>25 MR. GONZALEZ: Object to form.</p>
<p style="text-align: right;">Page 103</p> <p>1 Q. (BY MR. CICCONE) And when that paper came</p> <p>2 out, Colonel, were you still working for Honeywell?</p> <p>3 A. In 2017, yes.</p> <p>4 Q. Because you left in 2019?</p> <p>5 A. Right.</p> <p>6 Q. Do you recall ever discussing this</p> <p>7 publication with any of your colleagues at Honeywell?</p> <p>8 MR. GONZALEZ: Object to form.</p> <p>9 THE WITNESS: By 2017, I had changed</p> <p>10 roles within Honeywell and become a global training</p> <p>11 manager for all of our PPE. So I was not focusing</p> <p>12 specifically on the hearing conservation at that</p> <p>13 time.</p> <p>14 Although I read that as a professional</p> <p>15 document that I read, I don't recall specifically</p> <p>16 talking to anybody at Honeywell about it. It's</p> <p>17 possible I did.</p> <p>18 Q. (BY MR. CICCONE) Fair enough.</p> <p>19 The next paper, Colonel, is -- it's</p> <p>20 another 2017 paper.</p> <p>21 MR. CICCONE: I'm going to mark this</p> <p>22 as Exhibit 23.</p> <p>23 (Exhibit 23A marked)</p> <p>24 Q. (BY MR. CICCONE) And this is a paper by</p> <p>25 Deanna Meinke, who we discussed, William Murphy,</p>	<p style="text-align: right;">Page 105</p> <p>1 THE WITNESS: I don't know.</p> <p>2 Q. (BY MR. CICCONE) Do you know if Honeywell</p> <p>3 either pays for or participates with that research?</p> <p>4 MR. GONZALEZ: Object to form.</p> <p>5 THE WITNESS: I know they do not.</p> <p>6 Q. (BY MR. CICCONE) You know for a fact that</p> <p>7 they do not?</p> <p>8 A. I know for a fact they do not.</p> <p>9 Q. How do you know for a fact that they do</p> <p>10 not?</p> <p>11 A. I think as an employee I would have known</p> <p>12 had they done it. We tried to get them to sponsor a</p> <p>13 lot of NHCA activities, and they were reluctant to do</p> <p>14 that.</p> <p>15 Q. Why, budget? Other reasons?</p> <p>16 MR. GONZALEZ: Object to form.</p> <p>17 THE WITNESS: Budget.</p> <p>18 Q. (BY MR. CICCONE) And, Colonel, there's --</p> <p>19 on page 276 of this -- this article that we're</p> <p>20 discussing, the author is saying -- and I'll read</p> <p>21 it -- "Dual hearing protection", in parentheses,</p> <p>22 (earplugs, earplugs worn in combination with a</p> <p>23 earmuff), closed parenthesis, "provides the greatest</p> <p>24 protection."</p> <p>25 Do you see what I've read?</p>

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106 to 109

<p style="text-align: right;">Page 106</p> <p>1 A. I do.</p> <p>2 Q. And actually, there's a footnote, footnote</p> <p>3 76, and it happens to be the Murphy article that we</p> <p>4 had discussed earlier that was published in 2007,</p> <p>5 2008. Okay. Do you agree with that statement?</p> <p>6 MR. GONZALEZ: Objection to form.</p> <p>7 THE WITNESS: The physics of hearing</p> <p>8 protection makes that true.</p> <p>9 Q. (BY MR. CICCONE) And, again, I don't want</p> <p>10 to quibble, but dual hearing protection provides the</p> <p>11 greatest protection. Not that it will or not that it</p> <p>12 should. Not that it could. Not that it may. They</p> <p>13 seem to be, it's unconditional. It does provide the</p> <p>14 greatest protection.</p> <p>15 Do you agree with my interpretation of</p> <p>16 that?</p> <p>17 MR. GONZALEZ: Objection, sidebar and</p> <p>18 form.</p> <p>19 THE WITNESS: I do not because I can</p> <p>20 think of an exception.</p> <p>21 Q. (BY MR. CICCONE) What exception can you</p> <p>22 think of?</p> <p>23 A. If you don't wear an earplug well at all,</p> <p>24 and you are only wearing the earmuff, and that's</p> <p>25 what's providing the big amount of protection for</p>	<p style="text-align: right;">Page 108</p> <p>1 earplugs that are at issue in this case, it says that</p> <p>2 they are the USA Shooting Team official supplier. Do</p> <p>3 you see that?</p> <p>4 A. I do.</p> <p>5 Q. Okay. When you were still at Honeywell, do</p> <p>6 you know if Honeywell was the official supplier of</p> <p>7 the USA Shooting Team?</p> <p>8 MR. GONZALEZ: Objection, form.</p> <p>9 THE WITNESS: At some point in time,</p> <p>10 we were.</p> <p>11 Q. (BY MR. CICCONE) And do you know what in</p> <p>12 particular Honeywell supplied to the team?</p> <p>13 A. I do not.</p> <p>14 Q. Did you ever consult with any team members</p> <p>15 with respect to the type of hearing protection that</p> <p>16 the team members should wear while shooting firearms?</p> <p>17 A. No, I did not.</p> <p>18 Q. Do you know, Colonel, whether, in fact,</p> <p>19 Honeywell is the official supplier to the USA</p> <p>20 Shooting Team?</p> <p>21 MR. GONZALEZ: Currently?</p> <p>22 MR. CICCONE: Currently.</p> <p>23 MR. GONZALEZ: Object to form.</p> <p>24 THE WITNESS: I don't know.</p> <p>25 Q. (BY MR. CICCONE) Do you know when the last</p>
<p style="text-align: right;">Page 107</p> <p>1 you, you're likely to be getting less protection than</p> <p>2 you would if you had a well-fit foam earplug and a</p> <p>3 muff on top of it.</p> <p>4 Q. I understand that. But we've discussed</p> <p>5 earlier that if, for whatever reason, the plug is not</p> <p>6 fitting correctly, you agree that you will get at</p> <p>7 least some attenuation from wearing the muff?</p> <p>8 A. I do agree.</p> <p>9 THE VIDEOGRAPHER: Excuse me, sir. We</p> <p>10 have less than five minutes left.</p> <p>11 Q. (BY MR. CICCONE) Okay. Let me talk one</p> <p>12 more -- let me see if we have another video.</p> <p>13 Colonel, do you know what the USA</p> <p>14 Shooting Team does? Have you ever heard of that</p> <p>15 organization?</p> <p>16 A. I have heard of them.</p> <p>17 Q. Do you know what that organization does?</p> <p>18 MR. GONZALEZ: Object to form.</p> <p>19 THE WITNESS: I don't know a lot of</p> <p>20 detail about them, but I'm met a couple of them one</p> <p>21 time.</p> <p>22 Q. (BY MR. CICCONE) Are these people that are</p> <p>23 training to go to the Olympics, or do you know?</p> <p>24 A. I believe they are.</p> <p>25 Q. Because, Colonel, the package of Honeywell</p>	<p style="text-align: right;">Page 109</p> <p>1 time Honeywell was the official supplier for the USA</p> <p>2 Shooting Team?</p> <p>3 MR. GONZALEZ: Object to form.</p> <p>4 THE WITNESS: I do not.</p> <p>5 Q. (BY MR. CICCONE) Do you know, Colonel, if</p> <p>6 the USA Shooting Team recommends that its team</p> <p>7 members use Honeywell hearing protection equipment?</p> <p>8 MR. GONZALEZ: Object to form.</p> <p>9 THE WITNESS: I do not.</p> <p>10 As I mentioned, most of my work was on</p> <p>11 the industrial side, and this is on the retail side.</p> <p>12 So I don't know that level of detail.</p> <p>13 (Discussion off the record)</p> <p>14 THE VIDEOGRAPHER: Time now is</p> <p>15 4:16 p.m. We are off the record.</p> <p>16 (Recess from 4:16 p.m. to 4:28 p.m.)</p> <p>17 THE VIDEOGRAPHER: The time now is</p> <p>18 4:28 p.m. We back book on the record.</p> <p>19 (Exhibit 7 marked)</p> <p>20 Q. (BY MR. CICCONE) Colonel, before the break,</p> <p>21 we were talking a little bit about this USA Shooting</p> <p>22 Team, and I want to direct your attention to a safety</p> <p>23 video that the team publishes on its website. And</p> <p>24 Exhibit No. 7, for the benefit of counsel, is a copy</p> <p>25 of the webpage, and it's got the link to the safety</p>

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<p style="text-align: right;">Page 110</p> <p>1 video.</p> <p>2 A. Okay.</p> <p>3 Q. And they say that this safety video was</p> <p>4 produced by the National Shooting Sports Foundation.</p> <p>5 Are you familiar at all with that organization?</p> <p>6 A. I am.</p> <p>7 Q. And I've seen you cite that organization in</p> <p>8 a couple of the publications. And tell me what your</p> <p>9 association is or your familiarity with that</p> <p>10 organization may be.</p> <p>11 A. Probably twofold. The National Shooting</p> <p>12 Sports Foundation is -- I guess you would call them a</p> <p>13 trade association.</p> <p>14 Q. I think that's how they characterize</p> <p>15 themselves, as a trade association for the firearms</p> <p>16 industry.</p> <p>17 A. Yes.</p> <p>18 Q. Okay. And tell me, they're based out of</p> <p>19 Connecticut?</p> <p>20 A. I don't know where they are based out of.</p> <p>21 I access them online, or, you know, through seeing</p> <p>22 their booths at events or something like that.</p> <p>23 But, yeah, trade associations of the</p> <p>24 companies that have anything to do with firearms.</p> <p>25 Q. Do you know if Honeywell is a member of the</p>	<p style="text-align: right;">Page 112</p> <p>1 pistol shooting, and rifle shooting, and shotgun</p> <p>2 shooting. And we did that for a weekend and</p> <p>3 basically fundraised for the National Shooting Sports</p> <p>4 Foundation.</p> <p>5 Q. And what year do you think you went to that</p> <p>6 event?</p> <p>7 A. It was probably --</p> <p>8 MR. GONZALEZ: Object to form.</p> <p>9 THE WITNESS: Probably -- and I don't</p> <p>10 remember -- maybe 2011 or somewhere around there.</p> <p>11 Q. (BY MR. CICCONE) Okay. And you said that</p> <p>12 Howard Leight had a shooting team. You mean Howard</p> <p>13 Leight, the inventor or businessman, or Howard</p> <p>14 Leight, the product --</p> <p>15 A. Howard Leight, the product. Yes.</p> <p>16 Q. So that would have been Honeywell had a</p> <p>17 shooting team?</p> <p>18 A. Correct.</p> <p>19 Q. Okay.</p> <p>20 A. And the second thing I had to do with them</p> <p>21 at all was -- again, most of my work for Honeywell</p> <p>22 was on the industrial side of things, but on rare</p> <p>23 occasions, the retail side would invite us to come</p> <p>24 over and help.</p> <p>25 And so I went to a SHOT Show, which is</p>
<p style="text-align: right;">Page 111</p> <p>1 associations?</p> <p>2 MR. GONZALEZ: Object to form.</p> <p>3 THE WITNESS: The retail side of</p> <p>4 Howard Leight, at least was at the time. You know,</p> <p>5 I'm not a Honeywell employee now, so I can't tell you</p> <p>6 whether they are now. But they were a member when I</p> <p>7 was at Honeywell, yes.</p> <p>8 Q. (BY MR. CICCONE) And you left Honeywell in</p> <p>9 2019?</p> <p>10 A. Yes.</p> <p>11 Q. And you were with Honeywell from about 2010</p> <p>12 until about 2019?</p> <p>13 A. 2008, yes.</p> <p>14 Q. And while you were at Honeywell, did you</p> <p>15 ever go to any National Shooting Sports Foundation</p> <p>16 events?</p> <p>17 A. Yes.</p> <p>18 Q. Okay. What events did you attend?</p> <p>19 A. The first event was, again, as a member of</p> <p>20 the association. Howard Leight had a shooting team</p> <p>21 that went to a fundraising weekend that the National</p> <p>22 Shooting Sports Foundation hosted.</p> <p>23 And I actually was chosen to be on the</p> <p>24 shooting team for that weekend, and so I got to go to</p> <p>25 Kentucky to this really cool place where they had</p>	<p style="text-align: right;">Page 113</p> <p>1 a huge trade show that they have once a year for all</p> <p>2 of the shooting sports businesses, and provided some</p> <p>3 education to range operators and anybody who, you</p> <p>4 know, would come listen to our training about Howard</p> <p>5 Leight and their new earmuff product that they had,</p> <p>6 and how to protect yourselves, that sort of thing.</p> <p>7 Q. What year do you think you went to that</p> <p>8 trade show?</p> <p>9 MR. GONZALEZ: Object to form.</p> <p>10 THE WITNESS: I, again, don't remember</p> <p>11 years but it would be somewhere around maybe 2013 or</p> <p>12 '14, maybe.</p> <p>13 Q. (BY MR. CICCONE) Okay. And that would have</p> <p>14 been -- would that have been after you published the</p> <p>15 article in Soldier Modernisation recognizing that</p> <p>16 NIOSH recommended double hearing protection for</p> <p>17 shooters?</p> <p>18 A. I don't remember which was first or second.</p> <p>19 Q. And it certainly would have been after</p> <p>20 NIOSH's alert of 2009 recommending that employers</p> <p>21 require that workers and shooters on indoor ranges</p> <p>22 wear double hearing protection?</p> <p>23 A. It is after that date.</p> <p>24 Q. And, Colonel, you say that you spoke at</p> <p>25 that conference on educational issues. I guess those</p>

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<p style="text-align: right;">Page 114</p> <p>1 included hearing conservation?</p> <p>2 A. Yes.</p> <p>3 Q. And give me a snapshot of the content of</p> <p>4 your address to the group, if you can remember.</p> <p>5 MR. GONZALEZ: Object to form.</p> <p>6 THE WITNESS: I really don't remember.</p> <p>7 I'd have to look at slides, but the message in</p> <p>8 general was to wear hearing protection whenever</p> <p>9 you're exposed to recreational firearms. And I</p> <p>10 answered questions from the audience that were,</p> <p>11 again, mostly range operators.</p> <p>12 Q. (BY MR. CICCONE) Do you recall discussing</p> <p>13 the notion of wearing double hearing protection on a</p> <p>14 firing range?</p> <p>15 MR. GONZALEZ: Object to form.</p> <p>16 THE WITNESS: I don't recall. But</p> <p>17 it's possible that I did.</p> <p>18 Q. (BY MR. CICCONE) And you said you had</p> <p>19 slides, so do you know where those slides are?</p> <p>20 A. No. And I don't have a Honeywell computer</p> <p>21 anymore, so...</p> <p>22 Q. Do you think Honeywell may still have a</p> <p>23 copy of your presentation?</p> <p>24 MR. GONZALEZ: Object to form.</p> <p>25 THE WITNESS: I have no idea.</p>	<p style="text-align: right;">Page 116</p> <p>1 protection?</p> <p>2 A. Yes.</p> <p>3 Q. Okay. Colonel, I want to -- I want to play</p> <p>4 a short clip from this safety video that is linked on</p> <p>5 the National USA Shooting Team video, and it's</p> <p>6 apparently produced by the National Shooting Sports</p> <p>7 Foundation. And you told us your experiences with</p> <p>8 that group.</p> <p>9 It's a long video, and I only want to</p> <p>10 show you a very short clip. And the clip begins at</p> <p>11 about two minutes into the video. And I produced the</p> <p>12 entire video on a flash drive.</p> <p>13 MR. GONZALEZ: You're getting it?</p> <p>14 Q. (BY MR. CICCONE) Ready?</p> <p>15 A. Uh-huh.</p> <p>16 Q. What I'm going to do, I'm going to fast</p> <p>17 forward this because I don't want to --</p> <p>18 (Exhibit 8 marked)</p> <p>19 (Video playing)</p> <p>20 Q. (BY MR. CICCONE) First of all, do you know</p> <p>21 this person who is giving this address?</p> <p>22 A. I do not.</p> <p>23 Q. Have you ever seen her before?</p> <p>24 A. No.</p> <p>25 (Video playing)</p>
<p style="text-align: right;">Page 115</p> <p>1 Q. (BY MR. CICCONE) When was the last time you</p> <p>2 saw that presentation?</p> <p>3 A. Probably --</p> <p>4 MR. GONZALEZ: Objection to form.</p> <p>5 THE WITNESS: -- when I gave it.</p> <p>6 Q. (BY MR. CICCONE) Did you just give it one</p> <p>7 time, or did you give it more than once?</p> <p>8 A. I think we might have had several sessions</p> <p>9 at the particular SHOT Show. And so, yes, I probably</p> <p>10 gave it several times to several different audience</p> <p>11 groups.</p> <p>12 Q. Okay. But that was the only time that you</p> <p>13 ever presented that material or -- in other words,</p> <p>14 did you go to a different event, maybe a different</p> <p>15 trade show, a different retreat, or whatever the</p> <p>16 occasion may have been?</p> <p>17 A. For that content?</p> <p>18 Q. Yes.</p> <p>19 A. That content was likely a subset of the</p> <p>20 seminar slides that we provided that you had copies</p> <p>21 of there, that the best practices in hearing</p> <p>22 conservation, the big deck.</p> <p>23 Q. Right. And that included the slide where</p> <p>24 you related that double hearing protection can</p> <p>25 provide more protection than a single layer of</p>	<p style="text-align: right;">Page 117</p> <p>1 Q. (BY MR. CICCONE) Let me stop it there. Do</p> <p>2 you see where she's wearing the earmuffs?</p> <p>3 A. Yes.</p> <p>4 Q. Do you have any concerns about how she's</p> <p>5 wearing those earmuffs?</p> <p>6 MR. GONZALEZ: Objection, form.</p> <p>7 THE WITNESS: I would prefer her to</p> <p>8 sweep her hair back when she puts the earmuffs on.</p> <p>9 Q. (BY MR. CICCONE) Okay. And how about the</p> <p>10 safety glasses that's she's wearing that would pass</p> <p>11 over her ears, would those safety glasses perhaps</p> <p>12 minimize the seal that those muffs are providing</p> <p>13 against the side of her head and protecting her</p> <p>14 hearing?</p> <p>15 MR. GONZALEZ: Object to form.</p> <p>16 THE WITNESS: There is some data that</p> <p>17 shows that for most type of safety glass temples, it</p> <p>18 doesn't degrade the hearing protector more than about</p> <p>19 5 dB. But for really thick ones, it can degrade the</p> <p>20 seal of the hearing protection.</p> <p>21 Q. (BY MR. CICCONE) Okay. And there's just a</p> <p>22 couple more seconds, and it will go quickly.</p> <p>23 (Video playing)</p> <p>24 Q. (BY MR. CICCONE) Did you hear what she just</p> <p>25 said?</p>

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<p style="text-align: right;">Page 118</p> <p>1 A. Uh-huh.</p> <p>2 Q. And that's the National Shooting Sports</p> <p>3 Foundation --</p> <p>4 A. Uh-huh.</p> <p>5 Q. -- saying that they recommend double</p> <p>6 hearing protection, the muffs and the plugs. Do you</p> <p>7 agree?</p> <p>8 MR. GONZALEZ: Object to form.</p> <p>9 Q. (BY MR. CICCONE) Yes?</p> <p>10 A. Yes.</p> <p>11 Q. Would you agree the USA Shooting Team</p> <p>12 recommends double hearing protection, the muffs and</p> <p>13 the plugs, to the extent that it's citing that safety</p> <p>14 video on its website?</p> <p>15 MR. GONZALEZ: Objection, form.</p> <p>16 THE WITNESS: One would assume, yes.</p> <p>17 (Exhibit 9 marked)</p> <p>18 Q. (BY MR. CICCONE) Colonel, this package of</p> <p>19 these Shooters Earplugs that we've been talking about</p> <p>20 where they're ideal for the shooting sports, the USA</p> <p>21 Shooting Team official supplier, Colonel, I know</p> <p>22 you're not a packaging expert, but you're certainly a</p> <p>23 hearing conservation expert. And I want you to tell</p> <p>24 me, if you can, do you see anything on that package</p> <p>25 of the Shooters Earplugs that discloses that NIOSH,</p>	<p style="text-align: right;">Page 120</p> <p>1 firearm?</p> <p>2 A. No.</p> <p>3 MR. GONZALEZ: Object, form.</p> <p>4 Q. (BY MR. CICCONE) Will a suppressor -- I'm</p> <p>5 sorry, what?</p> <p>6 A. It was -- making sure it wasn't talked</p> <p>7 over.</p> <p>8 THE VIDEOGRAPHER: Excuse me, sir,</p> <p>9 could you clip on the microphone again?</p> <p>10 MR. CICCONE: Oh, sorry about that.</p> <p>11 Q. (BY MR. CICCONE) Colonel, do you believe or</p> <p>12 have reason to believe that somebody who is using a</p> <p>13 suppressor should wear hearing protection --</p> <p>14 MR. GONZALEZ: Objection, form.</p> <p>15 Q. (BY MR. CICCONE) -- in addition to relying</p> <p>16 upon the suppressor?</p> <p>17 MR. GONZALEZ: Objection, form.</p> <p>18 THE WITNESS: Again, it's just one</p> <p>19 more level of protection.</p> <p>20 Q. (BY MR. CICCONE) Colonel, when did you</p> <p>21 first learn about the case that we're here to</p> <p>22 discuss?</p> <p>23 A. I want to say sometime maybe late 2017,</p> <p>24 2018.</p> <p>25 Q. I don't want to -- okay. I don't want to</p>
<p style="text-align: right;">Page 119</p> <p>1 the National Hearing Conservation Association, the</p> <p>2 National Sports Shooting Foundation, and the USA</p> <p>3 Shooting Team all recommend that shooters wear double</p> <p>4 hearing protection? Do you see anything on the</p> <p>5 package?</p> <p>6 MR. GONZALEZ: Objection, form.</p> <p>7 THE WITNESS: I do not.</p> <p>8 Q. (BY MR. CICCONE) Let me -- I'm going to</p> <p>9 digress very briefly -- and this is going to be very</p> <p>10 brief -- are you familiar with all the firearms</p> <p>11 suppressors?</p> <p>12 A. I am.</p> <p>13 Q. And are these sometimes called silencers?</p> <p>14 A. They are.</p> <p>15 Q. Okay. And I think most of us have seen</p> <p>16 James Bond and other heros in movies use a</p> <p>17 suppressor, but do you think that accurately reflects</p> <p>18 the noise attenuation that a suppressor or a silencer</p> <p>19 will actually provide, or is it just Hollywood?</p> <p>20 MR. GONZALEZ: Objection, form.</p> <p>21 THE WITNESS: It does not</p> <p>22 accurately -- most of the time does not accurately</p> <p>23 represent.</p> <p>24 Q. (BY MR. CICCONE) Okay. Will a suppressor</p> <p>25 completely eliminate or silence the noise from a</p>	<p style="text-align: right;">Page 121</p> <p>1 know what you may have discussed with legal counsel,</p> <p>2 but do you remember discussing the case with any of</p> <p>3 your colleagues or former colleagues at Honeywell?</p> <p>4 A. Yes.</p> <p>5 MR. GONZALEZ: Outside --</p> <p>6 Q. (BY MR. CICCONE) Outside legal counsel.</p> <p>7 THE WITNESS: Oh, no.</p> <p>8 MR. GONZALEZ: -- legal counsel.</p> <p>9 Q. (BY MR. CICCONE) You didn't talk to anybody</p> <p>10 in Honeywell, including any of your colleagues,</p> <p>11 former colleagues, or anybody like that?</p> <p>12 A. My colleague and I both spoke with Neil.</p> <p>13 MR. GONZALEZ: Again --</p> <p>14 Q. (BY MR. CICCONE) Okay. I don't want to</p> <p>15 know what you talked to your lawyer about.</p> <p>16 MR. GONZALEZ: He's asking any</p> <p>17 meetings that you talked to anybody at Honeywell</p> <p>18 where nobody from legal was there, meaning myself or</p> <p>19 Mr. Sambursky or anybody from legal.</p> <p>20 He's talking about non-privileged</p> <p>21 conversations.</p> <p>22 THE WITNESS: Yeah. None that I</p> <p>23 recall.</p> <p>24 Q. (BY MR. CICCONE) Colonel, other than legal</p> <p>25 counsel, have you ever discussed this case with</p>

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<p style="text-align: right;">Page 122</p> <p>1 anybody at Honeywell?</p> <p>2 A. Not that I recall.</p> <p>3 Q. You talked about your colleague. Can you</p> <p>4 name your colleague?</p> <p>5 A. I can.</p> <p>6 Q. What's her name, his name?</p> <p>7 A. His name. Dr. Bob Ghent.</p> <p>8 Q. And he is a gentleman who works in San</p> <p>9 Diego?</p> <p>10 A. Yes, sir.</p> <p>11 Q. What's his title? Is he an audiologist?</p> <p>12 A. He is an audiologist.</p> <p>13 Q. Did Bob call you? Did you call him? How</p> <p>14 did that conversation come about?</p> <p>15 A. Bob and I were both contacted by</p> <p>16 Mr. Sambursky, and we met with him, and he</p> <p>17 explained --</p> <p>18 MR. GONZALEZ: Don't talk to him</p> <p>19 about --</p> <p>20 Q. (BY MR. CICCONE) We don't --</p> <p>21 MR. GONZALEZ: -- any conversations</p> <p>22 with Mr. Sambur -- he's asking if you and Bob met --</p> <p>23 THE WITNESS: Talked outside of our</p> <p>24 meetings with Neil?</p> <p>25 MR. GONZALEZ: Right.</p>	<p style="text-align: right;">Page 124</p> <p>1 A. Yes.</p> <p>2 MR. GONZALEZ: Counsel, can we -- the</p> <p>3 one at issue for this case, I have no problem with</p> <p>4 just referencing it. Can we take a picture of the</p> <p>5 other one that you're showing?</p> <p>6 (Exhibit 11 marked)</p> <p>7 Q. (BY MR. CICCONE) We're going to use --</p> <p>8 Exhibit No. 9, Colonel, these are some photographs of</p> <p>9 these Shooters Earplugs that we've been talking</p> <p>10 about. And you have an exemplar box there in front</p> <p>11 of you.</p> <p>12 And then these MAXX Earplugs that</p> <p>13 we're currently talking about will be Exhibit No. 10.</p> <p>14 (Exhibit 10 marked)</p> <p>15 MR. GONZALEZ: Thank you.</p> <p>16 Q. (BY MR. CICCONE) And you can just -- you can</p> <p>17 use the boxes if you don't want to look at the</p> <p>18 pictures. But do you recall whether or not Sperian</p> <p>19 was selling those MAXX Earplugs when you first went</p> <p>20 to work for Sperian? That would have been about</p> <p>21 2008.</p> <p>22 A. I do recall.</p> <p>23 Q. Did you ever have any involvement with the</p> <p>24 marketing of that product, either with the marketing</p> <p>25 people, the labeling people, the people testing the</p>
<p style="text-align: right;">Page 123</p> <p>1 THE WITNESS: Yeah.</p> <p>2 Q. (BY MR. CICCONE) You didn't?</p> <p>3 A. Not that I recall.</p> <p>4 Q. Okay. You never -- Do you have any way to</p> <p>5 get in touch with him, for example, his cell phone?</p> <p>6 Do you have an email address for him?</p> <p>7 A. I do.</p> <p>8 Q. Did you communicate with him either by cell</p> <p>9 phone or by email outside of the context of this</p> <p>10 conversation that you had or may have had with legal</p> <p>11 counsel?</p> <p>12 A. Not that I recall.</p> <p>13 (Exhibit 10 marked)</p> <p>14 Q. (BY MR. CICCONE) Let me talk to you a</p> <p>15 little bit, Colonel -- we've talked to you about</p> <p>16 these Shooters Earplugs. And I want to ask you -- I</p> <p>17 want to ask you if you're familiar at all with this</p> <p>18 other model. I think these are called MAXX Earplugs?</p> <p>19 A. Uh-huh.</p> <p>20 Q. Are you familiar at all with that product</p> <p>21 line?</p> <p>22 A. Yes.</p> <p>23 Q. And do you know or do you believe that</p> <p>24 those MAXX Earplugs were sold by Sperian before</p> <p>25 Honeywell bought Sperian?</p>	<p style="text-align: right;">Page 125</p> <p>1 earplugs? Did you have any involvement at all with</p> <p>2 any of those people?</p> <p>3 A. Let me explain that this is basically the</p> <p>4 same earplug in a different color.</p> <p>5 Q. I wanted to ask you that. And how do you</p> <p>6 know that, Colonel?</p> <p>7 A. Because I worked in Honeywell, and I know</p> <p>8 how they're produced. And it's the same form, and</p> <p>9 they just use different coloring in the mix to make</p> <p>10 the different product.</p> <p>11 And -- yeah.</p> <p>12 Q. Do you know where those products are</p> <p>13 manufactured?</p> <p>14 A. I do.</p> <p>15 Q. Where?</p> <p>16 A. San Diego.</p> <p>17 MR. GONZALEZ: The MAXX, you're</p> <p>18 saying?</p> <p>19 THE WITNESS: Both.</p> <p>20 Q. (BY MR. CICCONE) Oh, is there one factory</p> <p>21 that produces both, if you know?</p> <p>22 A. Yes.</p> <p>23 Q. And have you ever been to that factory?</p> <p>24 A. I have.</p> <p>25 Q. What was your purpose in going to the</p>

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<p style="text-align: right;">Page 126</p> <p>1 factory?</p> <p>2 A. To provide training to our salespeople was</p> <p>3 one occasion.</p> <p>4 To meet with my boss there for another</p> <p>5 occasion.</p> <p>6 To have business meetings --</p> <p>7 Q. Your boss worked at the factory?</p> <p>8 A. My boss worked -- yeah, the same building,</p> <p>9 yes.</p> <p>10 Q. What was your boss's name?</p> <p>11 A. Brad Witt.</p> <p>12 Q. And Brad Witt has published a number of</p> <p>13 papers on hearing conservation as well, has he not?</p> <p>14 A. He has.</p> <p>15 Q. Is he still at Honeywell; do you know?</p> <p>16 A. He is not.</p> <p>17 Q. He retired or gone somewhere else?</p> <p>18 A. He retired.</p> <p>19 Q. Okay. And so you say that you went to the</p> <p>20 factory there in San Diego to discuss with groups</p> <p>21 including the salespeople?</p> <p>22 A. Yes.</p> <p>23 Q. What discussions did you have with the</p> <p>24 salespeople?</p> <p>25 A. We provided the salespeople with training</p>	<p style="text-align: right;">Page 128</p> <p>1 Q. Do you know if the military, in fact, does</p> <p>2 buy that earplug in bulk?</p> <p>3 A. They do.</p> <p>4 Q. And do you know how long that the military</p> <p>5 has been buying that MAXX Earplugs in bulk?</p> <p>6 A. I do not know that.</p> <p>7 Q. And when you were working for Honeywell,</p> <p>8 was the military buying the MAXX Earplugs from</p> <p>9 Honeywell in bulk?</p> <p>10 A. Yes.</p> <p>11 Q. Did you ever consult with any members of</p> <p>12 the military with respect to the expected uses of</p> <p>13 that MAXX Earplugs?</p> <p>14 MR. GONZALEZ: Object to form.</p> <p>15 THE WITNESS: That seems like a very</p> <p>16 awfully broad question.</p> <p>17 Q. (BY MR. CICCONE) Let me narrow it down.</p> <p>18 Did you ever consult with any members</p> <p>19 of the military with respect to what protection, if</p> <p>20 any, that those MAXX Earplugs would provide to</p> <p>21 service people to attenuate impulse noise from</p> <p>22 firearms?</p> <p>23 A. Yes.</p> <p>24 Q. What information did you provide them?</p> <p>25 MR. GONZALEZ: Object to form.</p>
<p style="text-align: right;">Page 127</p> <p>1 materials that they could share with their</p> <p>2 distributor customers about hearing conservation.</p> <p>3 Q. Okay. With respect to those Shooters</p> <p>4 Earplugs, what materials do you recall providing to</p> <p>5 the salespeople that they could share with their</p> <p>6 distributors and their customers?</p> <p>7 A. So let me clarify your question. Again, I</p> <p>8 worked on the industrial side, and I was training</p> <p>9 industrial salespeople. And the retail side of the</p> <p>10 business is who sells these two products that we're</p> <p>11 looking at here. So I did not train the salespeople</p> <p>12 on the retail side. I trained the salespeople on the</p> <p>13 industrial side.</p> <p>14 Q. Okay. Colonel, on the industrial side,</p> <p>15 were you training people that were selling to</p> <p>16 customers that operated shooting ranges?</p> <p>17 A. No, sir.</p> <p>18 Q. Do you know if either one of those earplugs</p> <p>19 is or ever has been distributed to any branch of the</p> <p>20 U.S. military?</p> <p>21 A. The MAXX Earplugs has a national stock</p> <p>22 number for the military.</p> <p>23 Q. Okay. National stock number means what?</p> <p>24 A. Means that the military can buy it in bulk</p> <p>25 easily.</p>	<p style="text-align: right;">Page 129</p> <p>1 THE WITNESS: In seminars and</p> <p>2 educational materials that we provided to the public</p> <p>3 in general, military people would often come to our</p> <p>4 seminars and be part of the audience, or I'm sure</p> <p>5 read some of these trade journals.</p> <p>6 And the information that we provided</p> <p>7 is that a well-fit foam earplug is -- provides the</p> <p>8 highest amount -- can provide, if it's well fit, the</p> <p>9 highest amount of protection for both continuous and</p> <p>10 impulse noise.</p> <p>11 Q. Did you tell the military when you were</p> <p>12 giving these instruction seminars to them that NIOSH</p> <p>13 recommended the wearing of double hearing protection</p> <p>14 to protect people against impulse noise from</p> <p>15 firearms?</p> <p>16 MR. GONZALEZ: Object to form.</p> <p>17 THE WITNESS: That is one piece of</p> <p>18 information that I shared where the other piece of</p> <p>19 information that goes along with this, especially in</p> <p>20 military environments, are that you don't often want</p> <p>21 the maximum amount of protection in a military</p> <p>22 environment because you lose situational awareness.</p> <p>23 Q. (BY MR. CICCONE) Right. And, of course,</p> <p>24 that's a big concern for people, particularly in</p> <p>25 urban combat situations; is that correct?</p>

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<p style="text-align: right;">Page 130</p> <p>1 A. It is, sir.</p> <p>2 Q. Colonel, while you were with Honeywell,</p> <p>3 were you aware that Honeywell was marketing Shooters</p> <p>4 Earplugs to people that could potentially wear them</p> <p>5 in indoor ranges and protect their hearing from</p> <p>6 firearms noises?</p> <p>7 A. I was aware of that.</p> <p>8 Q. Okay. And how did you become aware of</p> <p>9 that?</p> <p>10 A. Seeing them at places where I go, go to</p> <p>11 sporting goods store. And I knew there was a retail</p> <p>12 side of the business that sold these hearing</p> <p>13 protectors through those kind of distribution places</p> <p>14 there.</p> <p>15 Q. Did you ever talk to any of the people in</p> <p>16 the retail side of the business who were selling</p> <p>17 those Shooters Earplugs about the recommendations by</p> <p>18 NIOSH that a double hearing protection would better</p> <p>19 protect a person's hearing from impulse noise from</p> <p>20 firearms?</p> <p>21 MR. GONZALEZ: Object to form.</p> <p>22 THE WITNESS: It's possible that</p> <p>23 conversation took place because that was a point that</p> <p>24 we made in our routine training seminars.</p> <p>25 Q. (BY MR. CICCONE) Colonel, did you have any</p>	<p style="text-align: right;">Page 132</p> <p>1 THE WITNESS: I did not specifically</p> <p>2 discuss that.</p> <p>3 Q. (BY MR. CICCONE) Why not?</p> <p>4 MR. GONZALEZ: Object to form.</p> <p>5 THE WITNESS: Because I don't think</p> <p>6 there's a requirement to always wear double</p> <p>7 protection.</p> <p>8 Q. (BY MR. CICCONE) Do you think that it was</p> <p>9 important that the people on the retail side know</p> <p>10 that NIOSH and these other organizations were</p> <p>11 recommending that employees require that shooters</p> <p>12 wear double hearing protection? Do you think that it</p> <p>13 was important that they know that?</p> <p>14 MR. GONZALEZ: Objection, form.</p> <p>15 THE WITNESS: There's nothing on this</p> <p>16 package that says you can't wear this with an</p> <p>17 earmuff. And so ideal for shooting sports applies to</p> <p>18 earplug side of that. The double protection is a</p> <p>19 different issue. This is -- you can wear a muff on</p> <p>20 top of that. But when you look at just the plug, if</p> <p>21 you're just going to wear a plug, this is the ideal</p> <p>22 one.</p> <p>23 Q. (BY MR. CICCONE) Colonel, there is a --</p> <p>24 there is an outfit in Pennsylvania that's that called</p> <p>25 Michael & Associates. Are you familiar at all with</p>
<p style="text-align: right;">Page 131</p> <p>1 concerns with this retail side selling these earplugs</p> <p>2 as Shooters Earplugs that are ideal for shooting</p> <p>3 sports, knowing that NIOSH and these other</p> <p>4 organizations was recommending the use of double</p> <p>5 hearing production?</p> <p>6 MR. GONZALEZ: Object to form.</p> <p>7 THE WITNESS: Did I have any trouble</p> <p>8 with it? No, because what it's saying here is ideal</p> <p>9 for shooting sports, Shooters Earplugs, and in fact</p> <p>10 if you're going to use a hearing protector, a</p> <p>11 well-fit foam earplug would be the protector of</p> <p>12 choice.</p> <p>13 Q. (BY MR. CICCONE) Right. And we talked</p> <p>14 earlier about potential risk if the protectors don't</p> <p>15 fit properly, or if they are not inserted properly,</p> <p>16 the potential risk that the person would not get the</p> <p>17 protection that they needed to get to protect their</p> <p>18 hearing?</p> <p>19 MR. GONZALEZ: Object to form.</p> <p>20 THE WITNESS: Yes, we have talked</p> <p>21 about that.</p> <p>22 Q. (BY MR. CICCONE) Okay. Did you ever</p> <p>23 discuss that potential risk with the retail people at</p> <p>24 Honeywell that were selling those Shooters Earplugs?</p> <p>25 MR. GONZALEZ: Objection, form.</p>	<p style="text-align: right;">Page 133</p> <p>1 that outfit?</p> <p>2 A. I am.</p> <p>3 Q. Right. And the principal is a gentleman</p> <p>4 whose name is Kevin Michael. Do you know Kevin?</p> <p>5 A. I do.</p> <p>6 Q. And Kevin's background is what? He's an</p> <p>7 audiologist?</p> <p>8 A. He is.</p> <p>9 Q. He's a PhD?</p> <p>10 A. He is.</p> <p>11 Q. Do you know if his father started this</p> <p>12 business, Michael & Associates?</p> <p>13 A. His father did.</p> <p>14 Q. Did you know his father?</p> <p>15 A. No, I never met his father.</p> <p>16 Q. In any event, this business has been around</p> <p>17 for quite a while?</p> <p>18 A. It has.</p> <p>19 Q. Have you ever actually been to Michael &</p> <p>20 Associates, their test facility there in</p> <p>21 Pennsylvania?</p> <p>22 A. I've not, no.</p> <p>23 Q. Have you ever wanted to go?</p> <p>24 A. I have.</p> <p>25 Q. Do you know what it looks like and what</p>

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<p style="text-align: right;">Page 134</p> <p>1 kind of the equipment they have?</p> <p>2 A. Not specifically, but I know that they met</p> <p>3 NVLAP requirements, and I know what the NVLAP</p> <p>4 requirements are. And so, you know, I have a general</p> <p>5 idea what it looks like.</p> <p>6 Q. What do they do there? Do they the test</p> <p>7 hearing protection devices among other things?</p> <p>8 MR. GONZALEZ: Objection, form.</p> <p>9 THE WITNESS: They do.</p> <p>10 THE REPORTER: I'm sorry?</p> <p>11 THE WITNESS: They do.</p> <p>12 THE REPORTER: Thank you.</p> <p>13 Q. (BY MR. CICCONE) Colonel, do you know if</p> <p>14 Michael & Associates tests hearing protection</p> <p>15 equipment for a fee?</p> <p>16 In other words, you can pay them to</p> <p>17 test hearing equipment if you're manufacturing it and</p> <p>18 marketing it?</p> <p>19 MR. GONZALEZ: Objection, form.</p> <p>20 THE WITNESS: Yes.</p> <p>21 Q. (BY MR. CICCONE) And do you know if</p> <p>22 Honeywell has sent its hearing protection equipment</p> <p>23 to Michael & Associates over the years for testing?</p> <p>24 A. Yes.</p> <p>25 Q. And did they send hearing protection</p>	<p style="text-align: right;">Page 136</p> <p>1 (Exhibit 12 marked)</p> <p>2 Q. (BY MR. CICCONE) Colonel, there is a report</p> <p>3 that's dated December 1st of 2003 that is Exhibit No.</p> <p>4 12. And I'm going to ask you first whether you've</p> <p>5 ever seen that before.</p> <p>6 A. I do not believe I have.</p> <p>7 Q. Okay. You want to take a second and read</p> <p>8 through it. It's not very long.</p> <p>9 And I will represent to you that this</p> <p>10 report was produced in discovery in this case.</p> <p>11 A. (Reading.)</p> <p>12 MR. GONZALEZ: Can we go off the</p> <p>13 record for her to do that?</p> <p>14 MR. CICCONE: Sure.</p> <p>15 THE VIDEOGRAPHER: Time now is 4:56</p> <p>16 p.m. We are off the record.</p> <p>17 (Recess from 4:56 p.m. to 4:59 p.m.)</p> <p>18 THE VIDEOGRAPHER: The time now is</p> <p>19 4:59 p.m. We are back on the record.</p> <p>20 Q. (BY MR. CICCONE) Colonel, before the break,</p> <p>21 we were talking about the December 1st, 2003 Michael</p> <p>22 & Associates report. Have you had an opportunity to</p> <p>23 look at it?</p> <p>24 A. I have.</p> <p>25 Q. And it is addressed to Bacou-Dalloz. Is</p>
<p style="text-align: right;">Page 135</p> <p>1 equipment to Michael & Associates during the period</p> <p>2 of time that you worked for Honeywell?</p> <p>3 A. Yes.</p> <p>4 Q. Did they do it more than once?</p> <p>5 A. Yes.</p> <p>6 Q. Did you have any communication with either</p> <p>7 Kevin Michael or anybody at Michael & Associates with</p> <p>8 regard to them testing hearing protection equipment</p> <p>9 for Honeywell?</p> <p>10 A. That was not in my job description, no.</p> <p>11 Q. Did you ever communicate with Kevin Michael</p> <p>12 either on his testing or hearing protection equipment</p> <p>13 or on some other topic relating to hearing</p> <p>14 conservation?</p> <p>15 A. Other topics relating to hearing</p> <p>16 conservation.</p> <p>17 Q. Did y'all ever author a paper together?</p> <p>18 A. I'm trying to remember if we did. Not that</p> <p>19 I recall. Although, I've worked with him on ANSI,</p> <p>20 American National Standards Institute, projects.</p> <p>21 Q. Does he speak at conferences?</p> <p>22 A. He does.</p> <p>23 Q. Have you ever spoken at the same conference</p> <p>24 with him?</p> <p>25 A. Yes.</p>	<p style="text-align: right;">Page 137</p> <p>1 that the entity that owns Sperian that Honeywell</p> <p>2 subsequently purchased?</p> <p>3 A. It was, yes.</p> <p>4 Q. And that, Bacou-Dalloz was your employer</p> <p>5 back during the days that you worked for Sperian?</p> <p>6 A. No. Sperian was the successor of the</p> <p>7 Bacou-Dalloz.</p> <p>8 Q. Got it. Well, I think that Bacou bought</p> <p>9 Sperian, if I'm remembering correctly, and correct me</p> <p>10 if I'm wrong.</p> <p>11 A. I think it's the other way around.</p> <p>12 Q. I thought the French company bought Howard</p> <p>13 Leight's business, which was Sperian, and then</p> <p>14 Bacou-Dalloz sold the business to Honeywell. Correct</p> <p>15 me if I'm wrong.</p> <p>16 A. That's the -- yeah, that's sort of correct.</p> <p>17 The -- so it was Howard Leight, and then it was</p> <p>18 Bacou, and then it was Bacou-Dalloz. Then they</p> <p>19 changed the name to Sperian, who sold to Honeywell.</p> <p>20 Q. Okay. Got it.</p> <p>21 But in any event, this December 1st of</p> <p>22 2003 report was to Bacou-Dalloz?</p> <p>23 A. Yes.</p> <p>24 Q. And 2003, you were still in the Air Force</p> <p>25 at that time; were you not?</p>

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<p style="text-align: right;">Page 138</p> <p>1 A. I was.</p> <p>2 Q. All right. And according to this report,</p> <p>3 Colonel, they were sent the MAXX Earplugs for</p> <p>4 testing; is your understanding of these results?</p> <p>5 A. Yes, sir.</p> <p>6 Q. Before I ask you anything about this</p> <p>7 report, tell me whether Honeywell has the equipment</p> <p>8 and the personnel to test its own hearing protection</p> <p>9 devices if it wants to.</p> <p>10 MR. GONZALEZ: Object to form.</p> <p>11 THE WITNESS: They do, yes.</p> <p>12 Q. (BY MR. CICCONE) Okay. They have a</p> <p>13 laboratory somewhere with equipment and personnel</p> <p>14 trained to use that equipment; they can test their</p> <p>15 own hearing protection devices if they want to?</p> <p>16 A. Yes, sir.</p> <p>17 Q. Okay. But do they send them out instead of</p> <p>18 testing them internally for whatsoever reason?</p> <p>19 A. Yes, sir.</p> <p>20 Q. And you told me that while you worked for</p> <p>21 the Honeywell, they had sent a number of hearing</p> <p>22 protection devices out to Michael & Associates for</p> <p>23 testing; is that correct?</p> <p>24 A. Yes, sir.</p> <p>25 Q. Okay. Now, I want to ask, are you familiar</p>	<p style="text-align: right;">Page 140</p> <p>1 "These listeners were selected from a standby group</p> <p>2 of about 35 volunteers, mostly graduate students, who</p> <p>3 regularly served as listeners for measurements of</p> <p>4 this kind."</p> <p>5 Did you understand what I just read?</p> <p>6 A. Yes, sir.</p> <p>7 Q. Okay. So is it your understanding that</p> <p>8 there's a group of regular people that they test</p> <p>9 hearing protection devices?</p> <p>10 A. Yes.</p> <p>11 Q. So in other words, they don't get people</p> <p>12 off the street who are complete strangers. They get</p> <p>13 people that are part of a regular group that they</p> <p>14 normally use for testing?</p> <p>15 A. Yes, sir.</p> <p>16 Q. Do you know why they do it that way?</p> <p>17 MR. GONZALEZ: Object to form.</p> <p>18 THE WITNESS: I do.</p> <p>19 Q. (BY MR. CICCONE) Why?</p> <p>20 A. Because the EPA requires it for the</p> <p>21 labeling purposes.</p> <p>22 Q. And when Honeywell was testing its products</p> <p>23 internally, did Honeywell have a regular group of</p> <p>24 people that it used as volunteers to test its hearing</p> <p>25 products?</p>
<p style="text-align: right;">Page 139</p> <p>1 at all, Colonel, with the testing procedure where</p> <p>2 labs like Michael & Associates or even Honeywell test</p> <p>3 hearing protection devices?</p> <p>4 A. Yes, sir.</p> <p>5 Q. Have you ever actually been in a lab when</p> <p>6 the lab was testing a hearing protection device?</p> <p>7 A. I've been in the labs but not when the</p> <p>8 testing was going on.</p> <p>9 Q. But you're familiar with the way the</p> <p>10 process is supposed to work?</p> <p>11 A. Yes, sir.</p> <p>12 Q. Okay. And on page 1 of this report,</p> <p>13 they're saying that -- they talk about the ANSI</p> <p>14 standard. And then the next line is "using the</p> <p>15 experimenter-fit protocol". Experimenter-fit</p> <p>16 protocol. Do you know what they're talking about</p> <p>17 there?</p> <p>18 A. I do.</p> <p>19 Q. Okay. Tell me what that means.</p> <p>20 A. That means that the experimenter, the</p> <p>21 person that's running the laboratory, fits each of</p> <p>22 the volunteer subjects with the earplug according to</p> <p>23 the directions on the package.</p> <p>24 Q. Okay. Let's break that down. There's a</p> <p>25 line in this report, and it's on the first paragraph,</p>	<p style="text-align: right;">Page 141</p> <p>1 MR. GONZALEZ: Objection, form.</p> <p>2 THE WITNESS: They may have in the</p> <p>3 past, but it was difficult for them maintain a pool</p> <p>4 of subjects.</p> <p>5 And that could have been one of the</p> <p>6 reasons they asked Michael & Associates to do their</p> <p>7 testing.</p> <p>8 Q. (BY MR. CICCONE) Okay. And, Colonel, we</p> <p>9 were talking earlier about the experimenter-fit</p> <p>10 protocol. And you were saying that the tester, for</p> <p>11 example, whoever it was at Michael & Associates who</p> <p>12 was doing this, would fit the volunteer with the</p> <p>13 earplugs?</p> <p>14 A. That's correct.</p> <p>15 Q. Okay. Why didn't Michael & Associates</p> <p>16 trust the volunteer to fit the earplugs himself or</p> <p>17 herself?</p> <p>18 MR. GONZALEZ: Object to form.</p> <p>19 THE WITNESS: It's not a matter of</p> <p>20 trust. The protocol described in ANSI S3.19-1974</p> <p>21 requires experimenter fit.</p> <p>22 Q. (BY MR. CICCONE) Okay. And during the test,</p> <p>23 Colonel, did they expose these listeners to</p> <p>24 continuous noise in some way?</p> <p>25 MR. GONZALEZ: Objection, form.</p>

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<p style="text-align: right;">Page 142</p> <p>1 THE WITNESS: Yes.</p> <p>2 Q. (BY MR. CICCONE) Was there some sort of a</p> <p>3 device that could emit a controlled amount of noise</p> <p>4 that was part of the experiment that was being</p> <p>5 conducted?</p> <p>6 MR. GONZALEZ: Objection, form.</p> <p>7 THE WITNESS: Yes, there is.</p> <p>8 Q. (BY MR. CICCONE) And it could be duplicated</p> <p>9 each time. In other words, the device was always</p> <p>10 going to emit the same sounds regardless of the</p> <p>11 number of times that it emitted it?</p> <p>12 A. That's correct.</p> <p>13 Q. Okay. And according to this report,</p> <p>14 Michael & Associates got a noise reduction rating of</p> <p>15 the MAXX Earplugs of a 33; is that correct?</p> <p>16 A. That's correct.</p> <p>17 Q. Do you know if the experimenter at Michael</p> <p>18 & Associates adjusted the earplugs in the volunteer</p> <p>19 at any time during the testing process?</p> <p>20 MR. GONZALEZ: Objection, form.</p> <p>21 THE WITNESS: There are protocols and</p> <p>22 directions within the standard that allow the subject</p> <p>23 to listen to a fitting noise and say, I don't think</p> <p>24 this earplug is fit well, and the experimenter to</p> <p>25 adjust and refit the earplug.</p>	<p style="text-align: right;">Page 144</p> <p>1 Q. Okay. What is that saying? Can you</p> <p>2 explain it to us, please.</p> <p>3 MR. GONZALEZ: Objection, form.</p> <p>4 THE WITNESS: It's a standard</p> <p>5 disclaimer that says -- that is explaining that the</p> <p>6 noise reduction rating is done in a controlled</p> <p>7 environment according to a specific ANSI protocol,</p> <p>8 and that somebody else might not get those exact</p> <p>9 results.</p> <p>10 Q. (BY MR. CICCONE) Well, by "somebody else,"</p> <p>11 do you mean a user in the field might not get the</p> <p>12 same noise reduction rating as they did in the</p> <p>13 laboratory?</p> <p>14 A. That's one somebody else. Another group of</p> <p>15 panel could get a slightly different results.</p> <p>16 Q. We'll talk about that latter notion a</p> <p>17 little bit more in a minute. But I want to ask you,</p> <p>18 Colonel, tell me what the relevance of a NRR rating</p> <p>19 in the laboratory is. Why is it relevant?</p> <p>20 MR. GONZALEZ: Objection, form.</p> <p>21 Sidebar.</p> <p>22 THE WITNESS: The purpose of a noise</p> <p>23 reduction rating, the way it's explained in the EPA</p> <p>24 labeling documentation, is, in fact, to compare one</p> <p>25 hearing protector to another hearing protector.</p>
<p style="text-align: right;">Page 143</p> <p>1 Q. (BY MR. CICCONE) My question is this,</p> <p>2 Colonel, that can the experimenter by adjusting the</p> <p>3 fit of those earplugs get a high NRR that the</p> <p>4 experimenter might not otherwise get without</p> <p>5 adjusting the earplugs?</p> <p>6 MR. GONZALEZ: Objection to form.</p> <p>7 THE WITNESS: In the way that question</p> <p>8 is asked, they -- it could happen. They could also</p> <p>9 get less protection by adjusting them.</p> <p>10 Q. (BY MR. CICCONE) But Michael & Associates</p> <p>11 was being paid by the Bacou-Dalloz to test the</p> <p>12 earplugs, right?</p> <p>13 A. According to ANSI standards.</p> <p>14 Q. Right. And Honeywell paid them</p> <p>15 subsequently to test its earplugs; correct?</p> <p>16 A. That's the industry standard. That's what</p> <p>17 everybody does.</p> <p>18 Q. There's a disclaimer, Colonel, on the</p> <p>19 bottom of the first page. And it says, "Use these</p> <p>20 laboratory derived attenuation data for comparison</p> <p>21 purposes only. The amount of the protection afforded</p> <p>22 in field use is often significantly lower depending</p> <p>23 on how the protectors are fitted and worn."</p> <p>24 Do you understand what I just read?</p> <p>25 A. I do.</p>	<p style="text-align: right;">Page 145</p> <p>1 So a hearing protector that has a</p> <p>2 higher NRR has been proven in a laboratory to be able</p> <p>3 to produce a higher amount of attenuation than some</p> <p>4 that has a lower noise reduction rating.</p> <p>5 So the purpose of the NRR is</p> <p>6 comparison of two products.</p> <p>7 Q. (BY MR. CICCONE) So does it allow a</p> <p>8 consumer to compare earplug A to earplug B because</p> <p>9 earplug A has a higher noise reduction rating than</p> <p>10 earplug B?</p> <p>11 A. That's its purpose.</p> <p>12 Q. And do you believe or have reason to</p> <p>13 believe that a high NRR rating can be used be a</p> <p>14 manufacturer or a seller as a marketing tool? Like,</p> <p>15 hey, our earplugs have a higher NRR than our</p> <p>16 competitor's earplugs?</p> <p>17 MR. GONZALEZ: Object to form.</p> <p>18 THE WITNESS: Yes.</p> <p>19 Q. (BY MR. CICCONE) Colonel, do you believe</p> <p>20 that the NRR that is achieved in the laboratory is</p> <p>21 what a consumer could expect out in the real world?</p> <p>22 MR. GONZALEZ: Objection, form.</p> <p>23 THE WITNESS: If they wear the hearing</p> <p>24 protection properly, yes.</p> <p>25 Q. (BY MR. CICCONE) Okay. And the caveat is</p>

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<p style="text-align: right;">Page 146</p> <p>1 if they wear it properly?</p> <p>2 A. Yes.</p> <p>3 Q. And you explained that earlier that wearing</p> <p>4 them properly requires some basic skills, right?</p> <p>5 A. Yes.</p> <p>6 Q. Okay. Now --</p> <p>7 A. The user in the field can get higher</p> <p>8 attenuation than the noise reduction rating.</p> <p>9 Q. Do you believe it's more likely than not</p> <p>10 that the user in the field who doesn't know how to</p> <p>11 wear the earplugs correctly will get higher or lower</p> <p>12 NRR than people in the laboratory who were fit by the</p> <p>13 experimenter?</p> <p>14 MR. GONZALEZ: Objection, form.</p> <p>15 THE WITNESS: Data shows that there's</p> <p>16 a normal distribution of that.</p> <p>17 Q. (BY MR. CICCONE) What does that mean?</p> <p>18 A. That some of the users are going to get</p> <p>19 higher attenuation; many of them are going to get</p> <p>20 pretty close to what noise reduction rating is, and</p> <p>21 some are going to get lower. A normal distribution</p> <p>22 of people.</p> <p>23 (Exhibit 13 marked)</p> <p>24 Q. (BY MR. CICCONE) Colonel, there's a -- an</p> <p>25 article that you authored that was published in</p>	<p style="text-align: right;">Page 148</p> <p>1 Reduction Protection for Safety?</p> <p>2 THE WITNESS: To have the reader look</p> <p>3 at the article and find out more in depth what the</p> <p>4 noise reduction rating meant and understand that</p> <p>5 people could get both higher and lower amounts than</p> <p>6 what the noise reduction rating says.</p> <p>7 Q. (BY MR. CICCONE) Colonel, there is a</p> <p>8 disclosure that EPA apparently requires to be</p> <p>9 included on a package of the hearing protectors. And</p> <p>10 I'm going to ask you whether you're familiar with the</p> <p>11 disclosure. And what we've done is, Exhibit No. 9</p> <p>12 includes some photographs of the Shooters Earplugs</p> <p>13 that are in question in the case. And we have the</p> <p>14 exemplar box.</p> <p>15 And then what we have done is that we</p> <p>16 have taken the EPA disclosure that's pasted on the</p> <p>17 back of the box, and we have put a white piece of</p> <p>18 paper into the box so that the text stands out. And</p> <p>19 then we have enlarged it greatly. Okay?</p> <p>20 A. Uh-huh.</p> <p>21 Q. And are you familiar at all with that EPA</p> <p>22 disclosure?</p> <p>23 A. Yes, I'm familiar with it.</p> <p>24 Q. Okay. And I'll just read it out loud, and</p> <p>25 then I want to ask you some questions. It says,</p>
<p style="text-align: right;">Page 147</p> <p>1 Industrial Safety and Hygiene News, ISHN. And it's</p> <p>2 dated April 1st of 2015. Do you remember writing</p> <p>3 that paper?</p> <p>4 A. I do.</p> <p>5 Q. Okay. And when you wrote that paper, did</p> <p>6 you still work for Honeywell?</p> <p>7 A. I did.</p> <p>8 Q. And what was your purpose in writing that</p> <p>9 paper?</p> <p>10 A. Further education about what the noise</p> <p>11 reduction rating means, and making people aware of</p> <p>12 the then-very-new ability to do hearing protection</p> <p>13 fit testing.</p> <p>14 Q. Colonel, the title to the paper is an</p> <p>15 interesting title. And it says, Don't Rely Solely on</p> <p>16 Noise Reduction Ratings for Protection.</p> <p>17 Tell me what you were thinking when</p> <p>18 you wrote that.</p> <p>19 MR. GONZALEZ: Objection, sidebar.</p> <p>20 THE WITNESS: I can't tell you what I</p> <p>21 was thinking when I wrote that. It was a long time</p> <p>22 ago.</p> <p>23 MR. GONZALEZ: Form.</p> <p>24 Q. (BY MR. CICCONE) Well, what was your intent</p> <p>25 when titling the paper, Don't Rely Solely on Noise</p>	<p style="text-align: right;">Page 149</p> <p>1 "Although hearing protectors can be recommended for</p> <p>2 protection against the harmful effects of the</p> <p>3 impulsive noise, the noise reduction rating, NRR, is</p> <p>4 based on the attenuation of continuous noise and may</p> <p>5 not be an accurate indicator of the protection</p> <p>6 attainable against impulsive noise such as gunfire."</p> <p>7 Do you understand what I just read?</p> <p>8 A. I do.</p> <p>9 Q. What does that mean?</p> <p>10 A. It means that the regulatory requirement</p> <p>11 that the EPA had for labeling only applies to the</p> <p>12 testing of the hearing protector in continuous noise.</p> <p>13 Q. Do you believe or have reason to believe</p> <p>14 that the NRR rating on the box of the Shooters</p> <p>15 Earplugs is an indication of what protection that a</p> <p>16 user could expect from exposure to impulse noise such</p> <p>17 as gunfire?</p> <p>18 MR. GONZALEZ: Objection, form.</p> <p>19 THE WITNESS: The way you asked the</p> <p>20 question is -- sounds like you're asking me to say</p> <p>21 that if you tested it for impulse noise would you get</p> <p>22 the same kind of the reduction? And, no, you would</p> <p>23 not, because continuous noise and impulse noise are</p> <p>24 different. And this testing that's required for the</p> <p>25 labeling is required to be for continuous noise.</p>

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<p style="text-align: right;">Page 150</p> <p>1 Q. (BY MR. CICCONE) Colonel, with respect to</p> <p>2 the NRR of 33, do OSHA inspectors require that the 33</p> <p>3 be derated to some lower number to reflect the</p> <p>4 conditions that a worker will potentially encounter</p> <p>5 in a workplace?</p> <p>6 MR. GONZALEZ: Objection to form.</p> <p>7 THE WITNESS: OSHA recommends derating</p> <p>8 in a particular application of the noise reduction</p> <p>9 rating. When the employer is trying to determine if</p> <p>10 a hearing protector is adequate for a given</p> <p>11 continuous noise, specifically for the determination</p> <p>12 of adequacy, OSHA recommends that their inspectors</p> <p>13 derate the earplugs by 50 percent.</p> <p>14 Q. (BY MR. CICCONE) Okay. So in other words,</p> <p>15 if OSHA were to derate the 33 NRR in these Shooters</p> <p>16 Earplugs, would the NRR, according to OSHA, be half</p> <p>17 of that?</p> <p>18 A. Actually, the derating is more complicated</p> <p>19 than that. The noise reduction rating is measured in</p> <p>20 decibel C weighting. And the noise exposure that we</p> <p>21 measure for human beings for risk of noise-induced</p> <p>22 hearing loss is measured in decibel A weighting.</p> <p>23 And so to convert an NRR to a amount</p> <p>24 that you would expect a person to get, you would need</p> <p>25 to apply it in the environment that we just talked</p>	<p style="text-align: right;">Page 152</p> <p>1 50 percent in connection with exposure to continuous</p> <p>2 noise, that more likely than not OSHA would also</p> <p>3 derate hearing protectors with respect to exposure to</p> <p>4 impulsive noise?</p> <p>5 MR. GONZALEZ: Objection, form.</p> <p>6 THE WITNESS: Not necessarily because</p> <p>7 impulse noise is very different characteristics from</p> <p>8 continuous noise.</p> <p>9 Q. (BY MR. CICCONE) Do you think that people</p> <p>10 don't need to be protected against exposure to</p> <p>11 impulsive noise?</p> <p>12 MR. GONZALEZ: Objection, form.</p> <p>13 THE WITNESS: The way you ask the</p> <p>14 question, I do think people need to be protected</p> <p>15 against impulsive noise. It's a different kind of</p> <p>16 risk, a different character of noise risk than</p> <p>17 continuous noise.</p> <p>18 Q. (BY MR. CICCONE) And, Colonel, if these</p> <p>19 Shooters Earplugs that are ideal for shooting sports</p> <p>20 have a NRR of 33, what attenuation, if any, do you</p> <p>21 believe that they would provide to somebody exposed</p> <p>22 to impulsive noise from firearms?</p> <p>23 MR. GONZALEZ: Objection, form.</p> <p>24 THE WITNESS: I couldn't know unless</p> <p>25 they were tested according to the impulsive noise</p>
<p style="text-align: right;">Page 151</p> <p>1 about: Is it adequate to protect from their noise?</p> <p>2 You would subtract seven from the 33</p> <p>3 and then derate it by half.</p> <p>4 Q. So it's 26 -- 26 divided by 2 is 13?</p> <p>5 A. Yes.</p> <p>6 Q. So instead of the NRR of 33, OSHA would say</p> <p>7 that the NRR is really only 13?</p> <p>8 A. In that very specific application of, is</p> <p>9 this hearing protector adequate for the continuous</p> <p>10 noise exposure that the employee has.</p> <p>11 Q. Okay. Do you believe or have reason to</p> <p>12 believe that OSHA would derate the NRR in connection</p> <p>13 with exposure to impulsive noise; for example, from</p> <p>14 firearms?</p> <p>15 MR. GONZALEZ: Objection, form.</p> <p>16 THE WITNESS: They don't have a policy</p> <p>17 on that that I know of.</p> <p>18 Q. (BY MR. CICCONE) What has your experience</p> <p>19 with OSHA been with regard to derating NRRs on</p> <p>20 hearing protectors in connection with exposure to</p> <p>21 impulsive noise?</p> <p>22 A. I have no experience in connection to</p> <p>23 impulsive noise.</p> <p>24 Q. Do you believe or have reason to believe</p> <p>25 that if OSHA derates hearing protectors by more than</p>	<p style="text-align: right;">Page 153</p> <p>1 standard. And then it would likely be a higher</p> <p>2 number than that.</p> <p>3 Impulsive noise is very different than</p> <p>4 continuous noise.</p> <p>5 Q. (BY MR. CICCONE) So you don't believe that</p> <p>6 the NRR rating is relevant in any way with respect to</p> <p>7 exposure to impulsive noise, for example, from</p> <p>8 firearms?</p> <p>9 MR. GONZALEZ: Objection, form.</p> <p>10 THE WITNESS: I would not say that.</p> <p>11 The way you say it, it's not relevant in any way. We</p> <p>12 used to joke that NRR should stand for not really</p> <p>13 relevant. But its true purpose is to compare</p> <p>14 products. And so, yes, it is relevant in that if a</p> <p>15 consumer is comparing products for impulse noise</p> <p>16 protection, it's likely that a higher NRR will</p> <p>17 provide more protection than a lower NRR.</p> <p>18 Q. (BY MR. CICCONE) So you think --</p> <p>19 A. If it's fit properly.</p> <p>20 Q. Right. So you think there is a</p> <p>21 relationship between NRR and protection to impulsive</p> <p>22 noise?</p> <p>23 A. There is a relationship, but it's not a</p> <p>24 one-to-one relationship.</p> <p>25 Q. Okay. There's another article that I want</p>

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<p style="text-align: right;">Page 154</p> <p>1 to draw your attention.</p> <p>2 MR. CICCONE: What number are we on,</p> <p>3 23?</p> <p>4 THE REPORTER: 23.</p> <p>5 (Exhibit 23B marked)</p> <p>6 Q. (BY MR. CICCONE) And, Colonel, this is an</p> <p>7 article that was written by Scott Lake, and it's</p> <p>8 published on January 2nd of 2014, and it was</p> <p>9 published in Industrial Safety and Hygiene News.</p> <p>10 First of all, do you know Scott Lake?</p> <p>11 A. I do.</p> <p>12 Q. And how do you know him?</p> <p>13 A. From National Hearing Conservation</p> <p>14 Association membership and from serving with him on</p> <p>15 the American National Standards Institute committees.</p> <p>16 Q. And Scott, he works for an outfit called</p> <p>17 Westone Hearing Protection. That's in Colorado.</p> <p>18 A. He did.</p> <p>19 Q. Okay. And that company made custom hearing</p> <p>20 protectors?</p> <p>21 A. That's correct.</p> <p>22 Q. Okay. Are you familiar at all with that</p> <p>23 company?</p> <p>24 A. I am.</p> <p>25 Q. Have you ever done any work with that</p>	<p style="text-align: right;">Page 156</p> <p>1 the attenuation potential for these types of sounds."</p> <p>2 Do you see where I read?</p> <p>3 A. I do.</p> <p>4 Q. Do you agree with that statement?</p> <p>5 A. In context.</p> <p>6 MR. GONZALEZ: Objection, form.</p> <p>7 THE WITNESS: In context, I would</p> <p>8 agree with that.</p> <p>9 Q. (BY MR. CICCONE) And Scott continues,</p> <p>10 "NIOSH has recommended that hunters and shooters wear</p> <p>11 dual hearing protectors, earmuffs and plugs, when</p> <p>12 engaging in target practice and recreational</p> <p>13 shooting. The levels at the eardrum when using a</p> <p>14 single protector are close to the recommended maximum</p> <p>15 exposure of 140-decibel peak sound pressure level."</p> <p>16 Do you see where I've read that?</p> <p>17 A. Yes.</p> <p>18 Q. Do you agree with that statement?</p> <p>19 MR. GONZALEZ: Objection, form.</p> <p>20 THE WITNESS: So, again, I'm -- I need</p> <p>21 to read this whole article to get this into context</p> <p>22 because this is the end of an article.</p> <p>23 MR. GONZALEZ: Do you want to go off</p> <p>24 the record to read it?</p> <p>25 THE WITNESS: I wouldn't mind doing</p>
<p style="text-align: right;">Page 155</p> <p>1 company or for that company?</p> <p>2 A. When -- back in -- earlier in my military</p> <p>3 career when I was fitting hearing aids, I ordered ear</p> <p>4 molds for hearing aids from Westone.</p> <p>5 Q. These were custom earplugs?</p> <p>6 A. Well, no, they are not custom earplugs.</p> <p>7 They are custom ear pieces that go in -- to channel</p> <p>8 the hearing aid sound into the ear canal.</p> <p>9 Q. Okay. These were for somebody that you</p> <p>10 were consulting with or for you personally?</p> <p>11 A. These were for patients that I had in the</p> <p>12 military.</p> <p>13 (Exhibit 15 marked)</p> <p>14 Q. (BY MR. CICCONE) Okay. We were talking,</p> <p>15 Colonel, about whether or not there's a relationship</p> <p>16 between NRR and impulsive noise.</p> <p>17 And let me direct your attention to a</p> <p>18 statement that Scott makes in his paper. And I'll</p> <p>19 just read it out loud, and then I'll show it to you.</p> <p>20 He says, "There's really no known</p> <p>21 relationship between NRR results generated at linear</p> <p>22 acoustic levels and the impulsive peak insertion</p> <p>23 loss, IPIL, results generated at gunshot-like</p> <p>24 nonlinear acoustic levels. This makes the NRR on the</p> <p>25 product label somewhat irrelevant to understanding</p>	<p style="text-align: right;">Page 157</p> <p>1 that.</p> <p>2 MR. GONZALEZ: Can we go off the</p> <p>3 record?</p> <p>4 THE WITNESS: Because the second</p> <p>5 statement sounds odd to me. So I would like to read</p> <p>6 it in context.</p> <p>7 MR. CICCONE: No, sure. Sure.</p> <p>8 MR. GONZALEZ: Off the record.</p> <p>9 THE VIDEOGRAPHER: Would you like to</p> <p>10 go off the record?</p> <p>11 MR. GONZALEZ: Yes.</p> <p>12 THE VIDEOGRAPHER: The time now is</p> <p>13 5:22 p.m. We are off the record.</p> <p>14 (Recess from 5:22 p.m. to 5:28 p.m.)</p> <p>15 THE VIDEOGRAPHER: The time now is</p> <p>16 5:28 p.m. We are back on the record.</p> <p>17 Q. (BY MR. CICCONE) Colonel, before the break,</p> <p>18 we were talking about the article that Scott Lake</p> <p>19 published in ISHN news. The title of that article is</p> <p>20 High Level Impulse Sounds; How Well Will Your Hearing</p> <p>21 Protector Perform.</p> <p>22 And you've had an opportunity to read</p> <p>23 the article?</p> <p>24 A. I have. Yes.</p> <p>25 Q. And Scott talks about the NIOSH had</p>

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<p style="text-align: right;">Page 158</p> <p>1 recommended that hunters and shooters wear dual</p> <p>2 hearing protection.</p> <p>3 Do you remember reading that?</p> <p>4 A. Yes.</p> <p>5 Q. And then he says that "The levels at the</p> <p>6 eardrum when using a single protector are close to</p> <p>7 the recommended maximum exposure level of 140 decibel</p> <p>8 peak sound pressure level."</p> <p>9 Do you see that?</p> <p>10 A. Yes.</p> <p>11 Q. And correct me if I'm wrong, but is he</p> <p>12 saying that even if you're wearing a earplug</p> <p>13 correctly, that the attenuation that you could expect</p> <p>14 would still put you very close to that 140 decibel</p> <p>15 potentially dangerous exposure level?</p> <p>16 MR. GONZALEZ: Objection, form.</p> <p>17 THE WITNESS: I think -- no, I don't</p> <p>18 necessarily think he's exactly saying that. So,</p> <p>19 again, let me put it back into context.</p> <p>20 Early in the article, he makes the</p> <p>21 point, since attenuation tends to increase when the</p> <p>22 impulsive level increases, the constant value derived</p> <p>23 from the NRR measurement will likely underestimate</p> <p>24 the amount of protection one receives when wearing</p> <p>25 protection properly. He said for the impulse noise.</p>	<p style="text-align: right;">Page 160</p> <p>1 still put the sound pressure level at a range that</p> <p>2 it's potentially damaging to your hearing?</p> <p>3 MR. GONZALEZ: Object to form.</p> <p>4 THE WITNESS: I don't disagree with</p> <p>5 him, but it depends on the weapon that you're using</p> <p>6 and the impulse of the noise, certainly.</p> <p>7 Q. (BY MR. CICCONE)Well, sure. Do you agree,</p> <p>8 Colonel, that the assumption of all of this is that</p> <p>9 you're wearing the hearing protection correctly?</p> <p>10 A. It is, and he says that in here, too.</p> <p>11 Q. Right. Let's -- let me talk about another</p> <p>12 topic with you. Now, we had earlier -- let me keep</p> <p>13 it all together.</p> <p>14 A. Yes.</p> <p>15 Q. Colonel, we had earlier talked about the</p> <p>16 disclosure that the EPA requires on hearing</p> <p>17 protectors. And, specifically, we talked about the</p> <p>18 disclosure that's on the back of the Shooters</p> <p>19 Earplugs. And I think I had provided you with a</p> <p>20 blowup. And you probably have it there. Let me see</p> <p>21 if I have it.</p> <p>22 Yeah, here's the photograph that we</p> <p>23 took.</p> <p>24 A. Exhibit 9.</p> <p>25 MR. GONZALEZ: Exhibit 9.</p>
<p style="text-align: right;">Page 159</p> <p>1 So the reason impulsive noises are so</p> <p>2 different from continuous noises, and how hearing</p> <p>3 protectors work with them -- and he explains this in</p> <p>4 the article -- is that at the lower levels, say at</p> <p>5 this 140 dBP, you get X amount of protection. But at</p> <p>6 150, you get more protection. And at 160, you get</p> <p>7 more protection. And at 170, you get even more</p> <p>8 protection.</p> <p>9 So protection from a non -- from</p> <p>10 impulse noise is nonlinear. It changes as the</p> <p>11 impulse level changes. So you can't use a single</p> <p>12 number. And that's what the EPA was proposing at the</p> <p>13 time, is that there be a range of numbers for</p> <p>14 continuous noise and a completely different number</p> <p>15 for impulse noise that shows that nonlinear</p> <p>16 performance of the hearing protector. That it gives</p> <p>17 you this protection at 150, this much at 160, and</p> <p>18 this much at 170.</p> <p>19 That never went into effect, but</p> <p>20 that's what the EPA was proposing at the time. And</p> <p>21 that's what this article was trying to explain.</p> <p>22 Q. Okay. So do you disagree with his</p> <p>23 statement that the level at which the eardrum is</p> <p>24 exposed to a sound pressure level when wearing only a</p> <p>25 single protection device, for example, earplugs, will</p>	<p style="text-align: right;">Page 161</p> <p>1 Q. (BY MR. CICCONE)Exhibit 9.</p> <p>2 Colonel, are you familiar enough with</p> <p>3 the EPA regulations to be able to tell us whether you</p> <p>4 believe that that disclosure is supposed to be put on</p> <p>5 the product in such a way that it can be seen easily?</p> <p>6 MR. GONZALEZ: Objection, form.</p> <p>7 THE WITNESS: The EPA regulation just</p> <p>8 says you have to have it on the packaging. It can be</p> <p>9 on an insert in packaging.</p> <p>10 This -- this -- well, this part has to</p> <p>11 be on the outside, this little graph that has the</p> <p>12 noise reduction rating 33, and where it was</p> <p>13 manufactured, that's has to be on the outside.</p> <p>14 Additional information can be on the</p> <p>15 insert in the packaging.</p> <p>16 Q. (BY MR. CICCONE)Do you believe that the</p> <p>17 disclosure is supposed to be legible?</p> <p>18 MR. GONZALEZ: Objection, form.</p> <p>19 THE WITNESS: Well, certainly.</p> <p>20 Q. (BY MR. CICCONE) And -- Well, right, and of</p> <p>21 course you know what the disclosure says. In other</p> <p>22 words, you're familiar with the language of the</p> <p>23 disclosure, are you not?</p> <p>24 A. I couldn't cite it, but I understand it,</p> <p>25 yes.</p>

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<p style="text-align: right;">Page 162</p> <p>1 Q. Right. And look, I want you to be honest</p> <p>2 with you. I mean, here's an exemplar package of</p> <p>3 these earplugs. Without taking the earplugs out of</p> <p>4 the package, can you easily read the disclosure?</p> <p>5 MR. GONZALEZ: Objection, form.</p> <p>6 THE WITNESS: Would you like me to</p> <p>7 read it?</p> <p>8 Q. (BY MR. CICCONE) Well, you already know what</p> <p>9 it says. And I'm asking you, if you didn't already</p> <p>10 know what it said, could you easily read it without</p> <p>11 taking the earplugs out of the package?</p> <p>12 MR. GONZALEZ: Objection, form.</p> <p>13 Sidebar.</p> <p>14 THE WITNESS: I could read it, yes.</p> <p>15 Q. (BY MR. CICCONE) Easily?</p> <p>16 MR. GONZALEZ: Objection, form.</p> <p>17 THE WITNESS: "Easily" is a relative</p> <p>18 term.</p> <p>19 I can read it. Yes.</p> <p>20 Q. (BY MR. CICCONE) And how about the MAXX</p> <p>21 Earplugs that are supposed to be the same as the</p> <p>22 Shooters Earplugs? Colonel, do you see that</p> <p>23 disclosure anywhere on that package of earplugs?</p> <p>24 MR. GONZALEZ: That's in exhibit --</p> <p>25 it's an exhibit you already have?</p>	<p style="text-align: right;">Page 164</p> <p>1 think we're going to skip because of the length of</p> <p>2 time that we've been here. But what I want to talk</p> <p>3 to you generally about is, what role, if any, that</p> <p>4 you played with respect to the EPA's proposed</p> <p>5 amendment to the noise reduction rating, labeling,</p> <p>6 and testing provisions.</p> <p>7 A. I testified in front of the EPA about the</p> <p>8 proposed rule change --</p> <p>9 Q. Okay. And so that we can understand each</p> <p>10 other, there's a -- Exhibit No. 15 is dated</p> <p>11 August 5th of 2009. And this is from the EPA's</p> <p>12 website, and it's got the proposed changes. And is</p> <p>13 that something that you've ever seen before?</p> <p>14 A. Yes.</p> <p>15 Q. Okay. And among other things, Colonel, am</p> <p>16 I correct that EPA says in the proposal -- and</p> <p>17 there's a lot of information -- "Professional trade</p> <p>18 -- professional and trade organizations,</p> <p>19 manufacturers, and other federal agencies have</p> <p>20 presented their that concerns to EPA on a number of</p> <p>21 significant issues, including the required test</p> <p>22 method, the required noise reduction rating, and the</p> <p>23 required textual information on the labels, all</p> <p>24 interested persons generally agree that the existing</p> <p>25 regulations need to be revised to address new</p>
<p style="text-align: right;">Page 163</p> <p>1 MR. CICCONE: It is.</p> <p>2 MR. GONZALEZ: Just want to make sure</p> <p>3 you're talking about --</p> <p>4 MR. CICCONE: I think it's going to be</p> <p>5 Exhibit No. 10.</p> <p>6 MR. GONZALEZ: Thank you.</p> <p>7 Q. (BY MR. CICCONE) Do you see the disclosure</p> <p>8 anywhere on that package?</p> <p>9 A. I don't see it here.</p> <p>10 Q. Do you know why it's not there?</p> <p>11 MR. GONZALEZ: Objection, form.</p> <p>12 THE WITNESS: I do not.</p> <p>13 Q. (BY MR. CICCONE) And are you saying that you</p> <p>14 think that that disclosure can be inside the package,</p> <p>15 or does it have to be on the outside of the package?</p> <p>16 A. It can be on the inside. And there's some</p> <p>17 insert inside this package, and it's likely in there.</p> <p>18 Q. Okay. Well, we'd have to open that, and</p> <p>19 we're not going to do that today.</p> <p>20 I want to talk to you briefly,</p> <p>21 Colonel, about the 1970 -- the EPA proposed changes</p> <p>22 to the NRR regulations. Are you familiar at all with</p> <p>23 those proposed changes?</p> <p>24 A. I am.</p> <p>25 Q. And there's a third video for you that I</p>	<p style="text-align: right;">Page 165</p> <p>1 technology products, related test methodologies, and</p> <p>2 current user needs."</p> <p>3 Do you see where I read that?</p> <p>4 A. I do.</p> <p>5 Q. And, Colonel, when you say you testified</p> <p>6 before the EPA, did you go to Washington, D.C., and</p> <p>7 testify?</p> <p>8 A. We did.</p> <p>9 Q. Okay. Who is "we"?</p> <p>10 A. Brad Witt, my boss at the time, myself, and</p> <p>11 I believe our marketing director at the time, Renee</p> <p>12 Bessette, went with us.</p> <p>13 Q. And what year would this have been?</p> <p>14 A. Probably 2009.</p> <p>15 Q. Because the EPA is suggesting now that</p> <p>16 there's going to be a workshop in March of 2003.</p> <p>17 Do you see that?</p> <p>18 A. That was before my time.</p> <p>19 Q. Well, maybe I misread it. Let me see.</p> <p>20 Maybe I misquoted something because I want to make</p> <p>21 sure we get it correct.</p> <p>22 A. It's down there.</p> <p>23 Q. Well, that's what it says. It says, "In</p> <p>24 response, EPA gave notice via the agency's website</p> <p>25 and by written invitation to interested parties to</p>

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<p>1 participate in a workshop at EPA's headquarters in 2 Washington, D.C., on March 27th, through 28th of 3 2003."</p> <p>4 That would have been four years after 5 that proposal was first published in the federal 6 register --</p> <p>7 A. Four years before.</p> <p>8 Q. Maybe I've just got my math backwards.</p> <p>9 A. No, I --</p> <p>10 Q. No, 2003. You're right. I just had the 11 dates wrong.</p> <p>12 So that workshop was before this came 13 out?</p> <p>14 A. My guess is the workshop was before this 15 came out because there's a lot of research and work 16 and communication that goes on prior to the 17 publication of a proposed rule. It can take years of 18 talking to manufacturers, talking to various people, 19 figuring out exactly what they want to propose.</p> <p>20 Q. Right.</p> <p>21 A. And then proposing it.</p> <p>22 Q. No, you're right because I've just got -- 23 look, I've just got the dates transposed. The 24 workshop was long before --</p> <p>25 A. Correct.</p>	<p>1 product.</p> <p>2 Q. (BY MR. CICCONE) So you told them you were 3 in favor; "you" being Honeywell or Sperian?</p> <p>4 A. Yes.</p> <p>5 Q. Colonel, were the regulations ever revised 6 as far as you know?</p> <p>7 A. They were not.</p> <p>8 Q. Okay. And it's been -- what, it's been 11 9 years --</p> <p>10 A. It has.</p> <p>11 Q. -- since the proposed regulations?</p> <p>12 Do you know why, or do you have -- do 13 you know why they weren't ever revised?</p> <p>14 MR. GONZALEZ: Objection, form.</p> <p>15 THE WITNESS: I do have some 16 information about that. And the information that I 17 have is that, so Bill Murphy at NIOSH was working 18 very closely with the EPA to create these new 19 changes. And after all of the hearings and everybody 20 saying, yes, this is a good idea, the person who was 21 working on this at the EPA retired. And there was no 22 driver at the EPA to keep it going.</p> <p>23 And other political factors, I think, 24 came in. And then at some point a couple years 25 later -- so probably 2011, 2012, somewhere around</p>
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<p>1 Q. -- the EPA had published these proposed 2 changes on the federal register.</p> <p>3 A. Yes.</p> <p>4 Q. So tell me, so you and Brad, and who was 5 the third person?</p> <p>6 A. Renee Bessette.</p> <p>7 Q. Renee. And Renee works with marketing?</p> <p>8 A. She did.</p> <p>9 Q. And the three of you went to Washington, 10 D.C., and you testified?</p> <p>11 A. Yes.</p> <p>12 Q. You testified, and they testified, as well?</p> <p>13 A. I --</p> <p>14 Q. If you can remember.</p> <p>15 A. I think Brad and I testified. I don't 16 think Renee actually spoke.</p> <p>17 Q. And give me the substance of your 18 testimony. What do you remember telling to the EPA?</p> <p>19 MR. GONZALEZ: Object to form.</p> <p>20 THE WITNESS: The substance was that 21 we were -- we -- Sperian at the time was in favor of 22 the change in labeling, and there were some specific 23 required changes on the manufacturers that we wanted 24 to have changed. Specifically, it was the length of 25 time that it -- that we had to be able to retest</p>	<p>1 there -- the EPA contacted Bill Murphy and said, can 2 you ask the manufacturers if anybody is prohibited in 3 selling these products because we haven't relabeled, 4 done the relabeling regulation? And Bill reached out 5 to many of us in the manufacturing industry, and no, 6 it wasn't causing us not to be able to sell our 7 products. And so the EPA's response to that was, we 8 don't need to change anything.</p> <p>9 Q. So all that work that was put into it, was 10 it just abandoned?</p> <p>11 A. It was.</p> <p>12 Q. Did funding play any role in the decision 13 to abandon the regulation amendments?</p> <p>14 MR. GONZALEZ: Objection, form.</p> <p>15 THE WITNESS: I can't answer that.</p> <p>16 (Exhibit 16 marked)</p> <p>17 Q. (BY MR. CICCONE) Well, here's 18 Exhibit No. 16, Colonel. This is a page from the 19 EPA's website. And it's EPA history, noise and the 20 Noise Control Act.</p> <p>21 And what it says -- I'll just read it 22 out loud, and you can look at it if you want. It 23 says, "In the past, EPA coordinated all federal noise 24 control activities through its Office of Noise 25 Abatement and Control. EPA phased out the office's</p>

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<p style="text-align: right;">Page 170</p> <p>1 funding in 1982 as a part of a shift in federal noise 2 control policy to transfer the primary responsibility 3 of regulating noise to state and local governments. 4 However, the Noise Control Act of 1972 and Quiet 5 Communities Act of 1978 were never rescinded by 6 Congress and remain in effect today; although, 7 essentially unfunded." 8 A. That's correct. 9 MR. GONZALEZ: Object to form. 10 THE WITNESS: And when you say did 11 funding have anything to do with that, yes, the 12 office was defunded back in the 80s and never funded 13 again, so... 14 Q. (BY MR. CICCONE) Do you know, Colonel, that 15 the -- if the State of Texas is working on any kind 16 of regulations to regulate hearing protection 17 devices, the testing of those devices, the labeling 18 of those devices; do you know if the State of Texas 19 is doing any kind of work like that? 20 A. I'm not aware of any. 21 Q. Do you know of any efforts that are being 22 made on the federal level to the either restore 23 funding to the EPA's noise control office or to try 24 to stimulate the amendment of the regulations that we 25 discussed earlier? Do you know of the efforts on the</p>	<p style="text-align: right;">Page 172</p> <p>1 regulations would have provided more information to 2 the consumer. 3 Q. (BY MR. CICCONE) Do you believe that the 4 current regulations adequately protect the public to 5 the extent that you believe they should? 6 MR. GONZALEZ: Objection, form. 7 THE WITNESS: I would like to see more 8 information, and there's actually an ANSI standard 9 being developed for testing of impulse noise with 10 hearing protectors. And, I mean, potentially once 11 that ANSI becomes a consensus standard approved by 12 the community, there could potentially be another 13 effort to try and get labeling changed. But... 14 Q. But the question was, Colonel: Do you 15 believe that the regulations, as written, protect the 16 public to the extent that you believe that they 17 should? 18 MR. GONZALEZ: Objection, form. 19 THE WITNESS: They're what we have 20 these days. I can't change that. 21 Q. (BY MR. CICCONE) Well, is your answer yes or 22 no? 23 MR. GONZALEZ: Object to form. 24 THE WITNESS: Restate the question. 25 Q. (BY MR. CICCONE) Do you believe that the</p>
<p style="text-align: right;">Page 171</p> <p>1 federal level that are being made along those lines? 2 A. On the federal level? 3 Q. Yes. 4 A. No. 5 Q. Colonel, do you believe that the 6 regulations that we've been discussing, these EPA 7 regulations, do you believe that those regulations 8 are intended to protect the public? 9 MR. GONZALEZ: Object to form. 10 THE WITNESS: Yes. 11 Q. (BY MR. CICCONE) Okay. And tell me, 12 generally, how you believe that those regulations are 13 intended to protect the public? 14 MR. GONZALEZ: Objection, form. 15 THE WITNESS: Again, the verbiage 16 about the noise reduction rating is that it's used to 17 compare products, to be able to say, this earplug is 18 capable of blocking more noise than this earplug is. 19 Q. (BY MR. CICCONE) Colonel, you told me that 20 you went to Washington to testify that you believed 21 that the regulations needed to be revised. 22 Do you believe that the regulations 23 are adequate the way they're currently written? 24 MR. GONZALEZ: Objection, form. 25 THE WITNESS: The proposed revised</p>	<p style="text-align: right;">Page 173</p> <p>1 federal regulations as currently written adequately 2 protect the public to the extent that you believe 3 that they should? 4 MR. GONZALEZ: Object to form. 5 THE WITNESS: I don't want to answer 6 just yes or no because it's more than a yes or no 7 question. 8 MR. GONZALEZ: He won't cut you off. 9 You can make your answer now, and then he can ask you 10 more questions. 11 THE WITNESS: Okay. 12 So I suppose I would answer no. More 13 information about how hearing protectors perform with 14 impulse noise would be helpful to consumers. 15 Q. (BY MR. CICCONE) Would it be helpful to 16 people that are considering buying Shooters Earplugs 17 that are ideal for shooting sports? 18 MR. GONZALEZ: Object to form. 19 THE WITNESS: It would be. And let me 20 say a little bit more about that, as well. Is the 21 additional information that would go onto this 22 package if those changes were made would, again, show 23 that a foam earplug would be the maximum amount of 24 protection that -- you know, when you compared it to 25 other hearing protectors, it would be the highest</p>

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<p style="text-align: right;">Page 174</p> <p>1 rated again.</p> <p>2 (Exhibit 17 marked)</p> <p>3 Q. (BY MR. CICCONE) Colonel, let's talk about</p> <p>4 another topic. There's an -- Exhibit No. 17, there's</p> <p>5 an affidavit by Kevin Michael that was produced in</p> <p>6 discovery in this case. And it also includes a</p> <p>7 report that he has written with respect to his</p> <p>8 alleged testing of these MAXX Earplugs or Shooters</p> <p>9 Earplugs on November 29 of 2018.</p> <p>10 Have you ever seen the document</p> <p>11 before?</p> <p>12 A. Yes.</p> <p>13 Q. That's the original report, I think, that</p> <p>14 Michael & Associates had written. Are you looking at</p> <p>15 the 2003 or 2018?</p> <p>16 A. 2018. And, yes, I have seen this before.</p> <p>17 Q. Tell me when you first saw it.</p> <p>18 A. Yesterday.</p> <p>19 Q. Okay. And I don't want to ask you who</p> <p>20 showed it to you, but I presume that you were given</p> <p>21 the document by somebody that's in this room.</p> <p>22 A. Yes.</p> <p>23 Q. Okay. Colonel, is it your understanding</p> <p>24 that in 2018 Michael & Associates was asked to test</p> <p>25 the MAXX Earplugs, which they say are the same as the</p>	<p style="text-align: right;">Page 176</p> <p>1 other cases?</p> <p>2 A. No, sir.</p> <p>3 Q. Is this the first case?</p> <p>4 A. Yes, sir.</p> <p>5 Q. Okay. And, Colonel, the report that</p> <p>6 Michael & Associates has written said that Neil sent</p> <p>7 them the earplugs for testing; do you see that?</p> <p>8 A. Uh-huh.</p> <p>9 Q. And I think it may be on the report --</p> <p>10 A. Uh-huh.</p> <p>11 Q. And do you know why Michael & Associates</p> <p>12 wouldn't just go out and buy the earplugs instead of</p> <p>13 having a lawyer involved in litigation send them the</p> <p>14 earplugs for testing?</p> <p>15 MR. GONZALEZ: Objection, form.</p> <p>16 THE WITNESS: I do know why. And it's</p> <p>17 because that's what the ANSI standard says.</p> <p>18 Q. (BY MR. CICCONE) That you have to get it</p> <p>19 from a lawyer representing a defendant in litigation?</p> <p>20 A. No. That the person requesting the test</p> <p>21 provides them.</p> <p>22 Q. Okay. And the person requesting the test</p> <p>23 in this case was the lawyer representing Honeywell in</p> <p>24 the litigation that we're here about?</p> <p>25 A. Yes, sir.</p>
<p style="text-align: right;">Page 175</p> <p>1 Shooters Earplugs, for potential attenuation against</p> <p>2 impulsive noises?</p> <p>3 A. That's what this document says.</p> <p>4 Q. And to your knowledge, was that the first</p> <p>5 time that Honeywell had ever asked Michael &</p> <p>6 Associates to test either the MAXX Earplugs or the</p> <p>7 Shooters Earplugs for attenuation against impulsive</p> <p>8 noise?</p> <p>9 MR. GONZALEZ: Objection, form.</p> <p>10 THE WITNESS: I don't know.</p> <p>11 Q. (BY MR. CICCONE) Okay. When you were</p> <p>12 Honeywell, do you ever recall Honeywell sending the</p> <p>13 MAXX Earplugs to Michael & Associates to be tested</p> <p>14 against the effects of the impulsive noise?</p> <p>15 A. I don't know, and I wouldn't necessary have</p> <p>16 known.</p> <p>17 Q. Now, that report, Colonel, it's addressed</p> <p>18 to -- it's addressed to Neil Sambursky. And you know</p> <p>19 Neil, don't you?</p> <p>20 A. Yes. Yes.</p> <p>21 Q. And I don't want to ask you what</p> <p>22 conversations, if any, that you've had with Neil, but</p> <p>23 I do want to ask you whether you have ever been</p> <p>24 involved in any other litigation with respect to</p> <p>25 Honeywell in which you've had to work with Neil on</p>	<p style="text-align: right;">Page 177</p> <p>1 Q. Okay. And --</p> <p>2 A. (Inaudible).</p> <p>3 THE REPORTER: I'm sorry. I didn't</p> <p>4 hear your answer.</p> <p>5 THE WITNESS: It appears to be so.</p> <p>6 THE REPORTER: Thank you.</p> <p>7 THE WITNESS: Based on the documents.</p> <p>8 Q. (BY MR. CICCONE) And according to the</p> <p>9 report, did Michael & Associates use a shock tube to</p> <p>10 generate the impulsive noise to test the earplugs?</p> <p>11 A. That's what that ANSI standard uses, so</p> <p>12 yes.</p> <p>13 Q. Do you know what a shock tube is?</p> <p>14 A. Yes.</p> <p>15 Q. And is it some sort of a device that will</p> <p>16 produce an impulsive noise?</p> <p>17 A. It is.</p> <p>18 Q. And it's sort of like the device that</p> <p>19 produces the continuous noise in that it will produce</p> <p>20 the same noise repetitively for purposes of testing?</p> <p>21 A. That is its purpose, yes.</p> <p>22 Q. Okay. And did they use human volunteers on</p> <p>23 this test, Colonel, or did they use a test dummy?</p> <p>24 MR. GONZALEZ: Objection, form.</p> <p>25 THE WITNESS: The ANSI standard</p>

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<p style="text-align: right;">Page 178</p> <p>1 requires for a measuring device, not human subjects.</p> <p>2 Q. (BY MR. CICCONE)Would it be potentially</p> <p>3 dangerous to use human subjects when testing a</p> <p>4 hearing protective device against impulsive noise?</p> <p>5 MR. GONZALEZ: Objection, form.</p> <p>6 THE WITNESS: It could be.</p> <p>7 Q. (BY MR. CICCONE)And you talked about the</p> <p>8 test that the military conducted in 1960s where they</p> <p>9 were exposing soldiers to like explosions to test the</p> <p>10 effectiveness of hearing protection?</p> <p>11 A. Uh-huh.</p> <p>12 Q. And you told us earlier, they don't do that</p> <p>13 anymore for various reasons, including probably</p> <p>14 ethical reasons.</p> <p>15 A. Human protection.</p> <p>16 Q. Right. And, Colonel, do you know how, or</p> <p>17 can you help me even understand how testing a hearing</p> <p>18 protector in a laboratory on a dummy against</p> <p>19 impulsive noise generated by a machine would</p> <p>20 replicate the conditions that a user of those</p> <p>21 earplugs would likely experience out in the field</p> <p>22 when exposed to, for example, gunfire noise?</p> <p>23 MR. GONZALEZ: Objection, form.</p> <p>24 Sidebar.</p> <p>25 THE WITNESS: Yeah. I need a more</p>	<p style="text-align: right;">Page 180</p> <p>1 Q. (BY MR. CICCONE)All right. If the EPA said</p> <p>2 in its proposed revisions of the regulations that the</p> <p>3 NRR did not represent conditions that somebody could</p> <p>4 expect to experience in field --</p> <p>5 A. Uh-huh.</p> <p>6 Q. -- in other words, they were laboratory</p> <p>7 conditions or controlled conditions, explain to me</p> <p>8 how testing those hearing protectors in a laboratory</p> <p>9 with a test dummy, how that would replicate or</p> <p>10 anticipate the conditions that somebody would</p> <p>11 experience when exposed to impulsive noise out in the</p> <p>12 field?</p> <p>13 MR. GONZALEZ: Objection, form.</p> <p>14 Sidebar.</p> <p>15 THE WITNESS: When you're trying to do</p> <p>16 any measures out in the field, there are enumerable</p> <p>17 variables that can't be controlled. And so the way</p> <p>18 to get a standardized measure to be able to then</p> <p>19 apply in a broader way is to do it in a laboratory in</p> <p>20 a standardized way. That's what the noise reduction</p> <p>21 rating does for a continuous noise, and that's what</p> <p>22 ANSI S12.42-2010 does for impulse noise.</p> <p>23 Q. (BY MR. CICCONE)Colonel, if NIOSH and OSHA</p> <p>24 would derate an NRR by more than 50 percent according</p> <p>25 to you with respect to continuous noise, why wouldn't</p>
<p style="text-align: right;">Page 179</p> <p>1 specific question there. How does it apply to the</p> <p>2 results of what a human would get, the exposure a</p> <p>3 human would get, the risk a human would get?</p> <p>4 Q. (BY MR. CICCONE)Yes.</p> <p>5 A. That is explained in the table that's on</p> <p>6 page 1 of this report showing that for a noise</p> <p>7 exposure at 130 dB peak, the allowable impulses per</p> <p>8 day for a human would be greater than 5,000 impulses.</p> <p>9 For a 150 dB peak, the allowable pulses would be over</p> <p>10 5,000 pulses. And for 168 dB, the allowable pulses</p> <p>11 per day would be 645 pulses.</p> <p>12 Q. Colonel, if the EPA says in this proposed</p> <p>13 regulations that the NRR really doesn't represent</p> <p>14 conditions that somebody could experience in the</p> <p>15 field -- okay -- tell me why that same analysis</p> <p>16 wouldn't apply to testing earplugs in a laboratory</p> <p>17 and a test dummy? I know you've explained it to us.</p> <p>18 But back off a little bit and explain to me why the</p> <p>19 NRR would be accurate, but the test against impulse</p> <p>20 noise would be or would not be?</p> <p>21 MR. GONZALEZ: Objection to form.</p> <p>22 Sidebar.</p> <p>23 THE WITNESS: I'm unclear what you're</p> <p>24 asking. So ask it again, and then I'll make sure I'm</p> <p>25 understanding what you're saying.</p>	<p style="text-align: right;">Page 181</p> <p>1 those same organizations derate Kevin Michael's</p> <p>2 ratings with respect to exposure, noise protection in</p> <p>3 his laboratory?</p> <p>4 MR. GONZALEZ: Objection, form.</p> <p>5 THE WITNESS: The physics is different</p> <p>6 between continuous noise and impulse noise.</p> <p>7 Q. (BY MR. CICCONE)So are you suggesting that</p> <p>8 they wouldn't derate his ratings at all,</p> <p>9 notwithstanding the fact that they were done in a</p> <p>10 laboratory under ideal conditions on a test dummy?</p> <p>11 A. No --</p> <p>12 MR. GONZALEZ: Objection, form.</p> <p>13 THE WITNESS: I'm not suggesting that.</p> <p>14 Q. (BY MR. CICCONE)Do you think that they</p> <p>15 would derate or would likely derate his findings to</p> <p>16 some extent or another?</p> <p>17 MR. GONZALEZ: Objection, form.</p> <p>18 THE WITNESS: I can't say what they</p> <p>19 would do. The fact that they derate -- that they</p> <p>20 recommend derating in a very specific application of</p> <p>21 the noise reduction hearing now is based on years of</p> <p>22 data. And so I would see that data would be applied</p> <p>23 to any recommendation for derating of impulse as</p> <p>24 well.</p> <p>25 And, again, this is a relatively new</p>

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<p style="text-align: right;">Page 182</p> <p>1 test. It's not done on a lot of products.</p> <p>2 But, yeah, I would see that you need</p> <p>3 to apply some data to think about whether OSHA would</p> <p>4 apply derating.</p> <p>5 And, again, as I said before, derating</p> <p>6 is used in a very specific application. And I just</p> <p>7 want to point out, remember, that an individual user</p> <p>8 could get way more than the NRR or less than that</p> <p>9 NRR. And OSHA in their particular application of the</p> <p>10 derating is just saying, for purposes of the finding</p> <p>11 the earplug that's adequate for this continuous</p> <p>12 noise, we recommend derating.</p> <p>13 Q. (BY MR. CICCONE) Colonel, there's a line</p> <p>14 that I want you to look at. Let's see. And it's</p> <p>15 going to be probably in Kevin's affidavit. And it's</p> <p>16 going to be...</p> <p>17 A. Can I add a thought about derating?</p> <p>18 Q. Of course.</p> <p>19 A. Remember how I talked about how hearing</p> <p>20 protectors act differently as the noise exposure goes</p> <p>21 up, They provide more protection, more attenuation.</p> <p>22 If you were going to derate, it would be a fairly</p> <p>23 complex derating paradigm because you'd derate it</p> <p>24 more at the lower exposures and less at the higher</p> <p>25 exposures. Do you understand what I'm saying?</p>	<p style="text-align: right;">Page 184</p> <p>1 believe that when different labs test a hearing</p> <p>2 protection product that they can and do have</p> <p>3 different experience, different results, and make</p> <p>4 different findings?</p> <p>5 A. That's correct.</p> <p>6 Q. And you talked about that earlier; did you</p> <p>7 not, that it's been your experience that different</p> <p>8 labs can achieve different results depending on</p> <p>9 whatever the conditions in the lab were?</p> <p>10 A. That's correct. There is an</p> <p>11 inter-laboratory study that actually showed some data</p> <p>12 that had those labs testing the same hearing</p> <p>13 protectors. And, remember, humans are involved in</p> <p>14 this, and so there's variability with the humans in</p> <p>15 each different laboratory. And that's where a lot of</p> <p>16 the variability comes from.</p> <p>17 (Off the record discussion)</p> <p>18 THE REPORTER: 24.</p> <p>19 (Exhibit 24 marked)</p> <p>20 Q. (BY MR. CICCONE) Okay. I want to talk to</p> <p>21 you about that inter-laboratory study. And, Colonel,</p> <p>22 are you referring to David Byrne study that was</p> <p>23 published by NIOSH. And it's -- there's a what</p> <p>24 appears to be a PowerPoint. And then there's the</p> <p>25 actual -- the manuscript of the article. And then</p>
<p style="text-align: right;">Page 183</p> <p>1 Q. Yes.</p> <p>2 A. It would be quite complex.</p> <p>3 Q. Okay. Colonel, this was the line that I</p> <p>4 wanted you to focus on. And it's in Kevin Michael's</p> <p>5 affidavit, where he says on page 2, and I've</p> <p>6 highlighted it simply to draw your attention to it</p> <p>7 and make it easier for you to see.</p> <p>8 It's on page 2 of his affidavit. And</p> <p>9 I'll just read it out loud. He says, "If the</p> <p>10 Honeywell/Howard Leight MAXX is properly fitted into</p> <p>11 the ear canal, it should provide a similar level of</p> <p>12 impulse insertion loss."</p> <p>13 Do you understand what I just read?</p> <p>14 A. Uh-huh.</p> <p>15 Q. And is the reverse of that also true; that</p> <p>16 if it's not properly inserted into your ear, it will</p> <p>17 not provide the protection that he indicates that it</p> <p>18 provided in his laboratory test?</p> <p>19 A. That is -- that is correct.</p> <p>20 Q. And this is what we've been talking about</p> <p>21 for a long time that proper fit, proper insertion is</p> <p>22 key to the protection that you could expect from any</p> <p>23 hearing protection device.</p> <p>24 A. It is.</p> <p>25 Q. Colonel, do you believe or have reason to</p>	<p style="text-align: right;">Page 185</p> <p>1 it's dated 2017. And it was published in Journal of</p> <p>2 Occupational Environmental Hygiene.</p> <p>3 Are you familiar at all with that</p> <p>4 study?</p> <p>5 A. I am.</p> <p>6 Q. And here's the -- the PowerPoint, I think,</p> <p>7 is a little easier to follow.</p> <p>8 First, do you know David Byrne?</p> <p>9 A. I do.</p> <p>10 Q. Okay. And he's somebody that works at</p> <p>11 NIOSH?</p> <p>12 A. He is.</p> <p>13 Q. And he's an audiologist?</p> <p>14 A. He is.</p> <p>15 Q. And he's somebody that's published papers?</p> <p>16 A. He has.</p> <p>17 Q. Okay. And have you spoken at conferences</p> <p>18 with him?</p> <p>19 A. Yes.</p> <p>20 Q. Is he somebody whose respected in your</p> <p>21 field?</p> <p>22 A. Yes.</p> <p>23 Q. Okay. And what they did apparently is they</p> <p>24 sent hearing protecting devices to, I think -- I</p> <p>25 believe to three laboratories. And then the U.S.</p>

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<p style="text-align: right;">Page 186</p> <p>1 Army independently tested the same hearing protectors</p> <p>2 in its own laboratory. Is that what you understand</p> <p>3 happened?</p> <p>4 A. They were one of the laboratories, yes.</p> <p>5 Q. Okay. And, actually, NIOSH was one of the</p> <p>6 laboratories, Michael & Associates was another</p> <p>7 laboratory, and then our friend at Honeywell, Robert</p> <p>8 Ghent was the third tester, and he tested the</p> <p>9 earplugs at Honeywell's safety products laboratory?</p> <p>10 MR. GONZALEZ: Objection, form.</p> <p>11 Sidebar.</p> <p>12 THE WITNESS: That's correct.</p> <p>13 Q. (BY MR. CICCONE) Colonel, did you have any</p> <p>14 involvement at all with the study that Byrne did or</p> <p>15 the publication of his paper?</p> <p>16 A. No.</p> <p>17 Q. When was the first time that you can</p> <p>18 remember reading it?</p> <p>19 A. I think I reviewed it before publication.</p> <p>20 Q. Did he send it to you and ask you to</p> <p>21 comment on it?</p> <p>22 A. I was part of the peer-review process.</p> <p>23 Q. Peer review meaning that people like</p> <p>24 yourself were asked to review and comment on it</p> <p>25 before it was published?</p>	<p style="text-align: right;">Page 188</p> <p>1 experience."</p> <p>2 So in other words, that's the</p> <p>3 laboratory that's actually conducting the report?</p> <p>4 A. That's correct.</p> <p>5 Q. And then he says also, "A-weighted</p> <p>6 attenuations measured with VeriPRO" -- and you and I</p> <p>7 have talked about VeriPRO -- "were significantly</p> <p>8 different from the ANSI results in two of the labs."</p> <p>9 Are you familiar with that finding?</p> <p>10 A. Yes.</p> <p>11 Q. So that's Honeywell's results were</p> <p>12 significantly different from the results from the</p> <p>13 other laboratories?</p> <p>14 MR. GONZALEZ: Objection to form.</p> <p>15 THE WITNESS: No. That's -- VeriPRO</p> <p>16 was a different test than the one you just said our</p> <p>17 friend, Bob Ghent. He did the ANSI test, but VeriPRO</p> <p>18 is a separate test.</p> <p>19 Q. (BY MR. CICCONE) Okay. I got it. But I</p> <p>20 just read that attenuation measured with VeriPRO were</p> <p>21 significantly different from the ANSI results.</p> <p>22 What does that -- what's he talking</p> <p>23 about? Or do you know?</p> <p>24 MR. GONZALEZ: Object to form.</p> <p>25 THE WITNESS: VeriPRO uses a different</p>
<p style="text-align: right;">Page 187</p> <p>1 A. Correct.</p> <p>2 Q. And as part of that peer-review process,</p> <p>3 did you give a thumbs up, thumbs down, or did you</p> <p>4 have any comment at all?</p> <p>5 A. I peer review a lot of papers, so I can't</p> <p>6 tell you exactly what I did with that. But if I had</p> <p>7 made any suggestions that were substantive, it would</p> <p>8 have been addressed and sent back to me for review.</p> <p>9 So, yes, eventually, I gave it a</p> <p>10 recommendation to be published.</p> <p>11 Q. Okay. And the results that are in this</p> <p>12 PowerPoint include these: He says, "Significantly</p> <p>13 different results from the three laboratories</p> <p>14 attributable to the subjects' experience."</p> <p>15 Is he talking about the test subjects?</p> <p>16 A. He is.</p> <p>17 Q. Okay. What does the test subjects'</p> <p>18 experience have to do with it?</p> <p>19 A. The test subjects respond to a hearing</p> <p>20 test, a threshold test, I just barely heard that</p> <p>21 tone, both with the earplugs in and out. And there's</p> <p>22 a bit variability associated with that subject</p> <p>23 response.</p> <p>24 Q. And he also says that, "Significant</p> <p>25 different results were attributable to the testers'</p>	<p style="text-align: right;">Page 189</p> <p>1 test procedure. It's not the threshold testing of, I</p> <p>2 just barely heard that tone of the hearing test.</p> <p>3 The task that the listener in VeriPRO</p> <p>4 has to do is to match the loudness of beeps going</p> <p>5 back and forth between ears. And he's saying that</p> <p>6 the different methodology found different results</p> <p>7 than what the ANSI standard of the threshold base</p> <p>8 does.</p> <p>9 Q. So in other words, different labs can make</p> <p>10 different findings?</p> <p>11 A. And different test procedures can make</p> <p>12 different findings.</p> <p>13 Q. Right. Colonel, how many labs are there in</p> <p>14 the United States that you know of that are capable</p> <p>15 of testing hearing protectors? Are there a lot? Are</p> <p>16 there a few --</p> <p>17 A. Five.</p> <p>18 Q. -- how many?</p> <p>19 A. I think there are five.</p> <p>20 Q. Okay. And how many of those labs like</p> <p>21 Michael & Associates will test hearing protectors for</p> <p>22 a fee?</p> <p>23 A. He is the only one that I know of currently</p> <p>24 for the last couple of decades that has done it for a</p> <p>25 fee.</p>

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190 to 193

<p style="text-align: right;">Page 190</p> <p>1 Q. Okay. And outside of the United States, do</p> <p>2 you know if there is any laboratory in Canada that</p> <p>3 will test hearing protectors for a fee?</p> <p>4 A. You know, I don't know that. I don't know.</p> <p>5 Q. How about in Europe?</p> <p>6 A. Yes, there is.</p> <p>7 Q. Is there one in Germany?</p> <p>8 A. I don't know. I assume there might be, but</p> <p>9 I don't know.</p> <p>10 Q. Do you believe that in testing hearing</p> <p>11 protectors that there's a subjective element to the</p> <p>12 test?</p> <p>13 In other words, the tester's intention</p> <p>14 may determine the testers' attention? In other</p> <p>15 words, that the tester is looking for may determine</p> <p>16 what the tester finds?</p> <p>17 MR. GONZALEZ: Objection, form.</p> <p>18 THE WITNESS: I think what you're</p> <p>19 asking is: Can the experimenter influence the</p> <p>20 results based on a bias they have?</p> <p>21 Q. (BY MR. CICCONE) Yes.</p> <p>22 A. And I believe that the ANSI standard is</p> <p>23 written to control that as much as possible. And so</p> <p>24 that's my answer.</p> <p>25 Q. Do you think the bias is still there</p>	<p style="text-align: right;">Page 192</p> <p>1 Force, did you play any role in the military's</p> <p>2 decision to distribute these 3M combat earplugs to</p> <p>3 service members?</p> <p>4 A. No.</p> <p>5 Q. Were you aware that the U.S. Government</p> <p>6 sued 3M in federal district court in South Carolina</p> <p>7 in 2016 over those 3M combat earplugs?</p> <p>8 A. I am aware --</p> <p>9 MR. GONZALEZ: Objection, to form.</p> <p>10 THE WITNESS: I am aware.</p> <p>11 Q. (BY MR. CICCONE) Did you know that the case</p> <p>12 settled?</p> <p>13 A. I did --</p> <p>14 Q. Did you know --</p> <p>15 MR. GONZALEZ: Objection, form.</p> <p>16 THE WITNESS: I did know the case</p> <p>17 settled, yes.</p> <p>18 Q. (BY MR. CICCONE) Do you know anything about</p> <p>19 the allegations that the government makes in that in</p> <p>20 Qui tam lawsuit against 3M in South Carolina?</p> <p>21 A. I don't understand that term, so I --</p> <p>22 Q. Well, Qui tam means that the federal</p> <p>23 government sued to recover damages that the federal</p> <p>24 government or member of the military, perhaps,</p> <p>25 experienced. Were you familiar at all with any of</p>
<p style="text-align: right;">Page 191</p> <p>1 notwithstanding the ANSI standard?</p> <p>2 MR. GONZALEZ: Objection, form.</p> <p>3 THE WITNESS: I can't speak to</p> <p>4 somebody's motivation.</p> <p>5 Q. (BY MR. CICCONE) Do you know if Kevin</p> <p>6 Michael regularly works for Honeywell?</p> <p>7 MR. GONZALEZ: Objection, form.</p> <p>8 THE WITNESS: It's my understanding</p> <p>9 that Michael's labs does most of the hearing</p> <p>10 protection testing for all of the hearing protector</p> <p>11 manufacturers, so, yeah, yes.</p> <p>12 Q. (BY MR. CICCONE) Let me talk to you a couple</p> <p>13 of topics, and then we're going to be done. Are you</p> <p>14 familiar with all of the 3M combat earplug</p> <p>15 litigation?</p> <p>16 A. I am.</p> <p>17 Q. And you were in the military, of course,</p> <p>18 from 2003 to 2015 in that epic -- I think you got out</p> <p>19 of the Air Force in 2004?</p> <p>20 A. I did.</p> <p>21 Q. And when you were in the Air Force,</p> <p>22 Colonel, were these 3M combat earplugs issued to Air</p> <p>23 Force service members?</p> <p>24 A. They were, yes.</p> <p>25 Q. Okay. And, Colonel, when you were the Air</p>	<p style="text-align: right;">Page 193</p> <p>1 the allegations that were made in that lawsuit?</p> <p>2 MR. GONZALEZ: Objection, form.</p> <p>3 THE WITNESS: Yes.</p> <p>4 Q. (BY MR. CICCONE) And were you familiar with</p> <p>5 the allegation that 3M manipulated laboratory testing</p> <p>6 in order to get high NRRs that were false? Are you</p> <p>7 familiar with the allegation?</p> <p>8 MR. GONZALEZ: Objection, form.</p> <p>9 THE WITNESS: In a broad sense, yes.</p> <p>10 Q. (BY MR. CICCONE) Are you aware that over</p> <p>11 1300 lawsuits have been filed against 3M in</p> <p>12 connection with those 3M combat earplugs?</p> <p>13 MR. GONZALEZ: Object to form.</p> <p>14 THE WITNESS: I'm not aware of the</p> <p>15 number of lawsuits, but I am aware that there are</p> <p>16 lawsuits.</p> <p>17 Q. (BY MR. CICCONE) Have you been contacted by</p> <p>18 anybody with respect to your service as an expert</p> <p>19 witness in that litigation?</p> <p>20 A. I have been subpoenaed in that case.</p> <p>21 Q. By whom?</p> <p>22 A. By a -- I don't know who the lawyer is. I</p> <p>23 assume it's a lawyer for the plaintiffs.</p> <p>24 Q. What's the lawyer's name?</p> <p>25 A. I don't have it. I don't have my subpoena</p>

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<p style="text-align: right;">Page 194</p> <p>1 in front of me.</p> <p>2 Q. Subpoenaed to do what?</p> <p>3 A. To provide documents during a time that I</p> <p>4 did some consulting for Aero.</p> <p>5 Q. And Aero is the outfit that marketed those</p> <p>6 earplugs before 3M bought Aero?</p> <p>7 A. That's correct.</p> <p>8 Q. What consulting did you do for Aero during</p> <p>9 the time that Aero was selling those earplugs to the</p> <p>10 military?</p> <p>11 A. I taught hearing conservation seminars to</p> <p>12 motivate people to protect their hearing and to share</p> <p>13 information about hearing testing and hearing</p> <p>14 regulations. Not hearing protection testing,</p> <p>15 people's hearing testing.</p> <p>16 Q. Have you been subpoenaed to testify at a</p> <p>17 deposition or a hearing, or do you know?</p> <p>18 A. I have not.</p> <p>19 Q. Do you know where you're supposed to appear</p> <p>20 to comply with the subpoena?</p> <p>21 A. I was supposed to provide documents.</p> <p>22 Q. And do you have the documents that you were</p> <p>23 requested to produce via the subpoena?</p> <p>24 MR. GONZALEZ: Objection, form.</p> <p>25 THE WITNESS: I provided them to my</p>	<p style="text-align: right;">Page 196</p> <p>1 about hearing conservation.</p> <p>2 Q. Did you know that Aero was falsifying its</p> <p>3 test records --</p> <p>4 A. No.</p> <p>5 MR. GONZALEZ: Objection, form.</p> <p>6 Let him finish the question before you</p> <p>7 answer.</p> <p>8 THE WITNESS: Answer? Yeah.</p> <p>9 MR. GONZALEZ: And, again, I'm going</p> <p>10 to be giving an objection.</p> <p>11 THE WITNESS: The way you ask it, did</p> <p>12 I know they were falsifying? I don't know if they</p> <p>13 were falsifying.</p> <p>14 I didn't do any product work with</p> <p>15 Aero.</p> <p>16 Q. (BY MR. CICCONE) Do you know or have reason</p> <p>17 to believe that Honeywell has been threatened with</p> <p>18 being brought into that class action suit in</p> <p>19 connection with those 3M combat earplugs?</p> <p>20 MR. GONZALEZ: Objection, form.</p> <p>21 THE WITNESS: I don't know anything</p> <p>22 about a Honey --</p> <p>23 Q. (BY MR. CICCONE) Do you know -- I'm sorry.</p> <p>24 A. -- relationship to that.</p> <p>25 THE REPORTER: You don't know anything</p>
<p style="text-align: right;">Page 195</p> <p>1 attorney.</p> <p>2 Q. (BY MR. CICCONE) And what's your -- your</p> <p>3 attorney, does he work or the Honeywell, or is this</p> <p>4 your private lawyer?</p> <p>5 A. It's my private lawyer.</p> <p>6 Q. And can you give me the Ghent's name?</p> <p>7 A. Alex Parrish.</p> <p>8 Q. Where is Alex?</p> <p>9 A. Pittsburgh, Pennsylvania.</p> <p>10 Q. Is he also Kevin Michael's lawyer?</p> <p>11 MR. GONZALEZ: Objection, form.</p> <p>12 THE WITNESS: No.</p> <p>13 Q. (BY MR. CICCONE) What documents did you</p> <p>14 provide to him?</p> <p>15 A. I provided the slides that we used in the</p> <p>16 seminars.</p> <p>17 Q. These were slides of -- some slides in</p> <p>18 connection with seminars you give to military</p> <p>19 personnel?</p> <p>20 A. Slides in connection to people I -- that I</p> <p>21 gave to the general safety public. It didn't have</p> <p>22 anything to do with the military.</p> <p>23 I was consulting -- this was when I</p> <p>24 was on leave from the Air Force, I just went and</p> <p>25 taught seminars with Aero to teach safety people</p>	<p style="text-align: right;">Page 197</p> <p>1 about --</p> <p>2 THE WITNESS: A Honeywell relationship</p> <p>3 to that.</p> <p>4 Q. (BY MR. CICCONE) Do you know of any</p> <p>5 veterans who allege they wore Honeywell earplugs</p> <p>6 during their military service, and that their hearing</p> <p>7 was damaged as a result of inadequate protection?</p> <p>8 MR. GONZALEZ: Objection, form.</p> <p>9 THE WITNESS: I am not aware of that.</p> <p>10 Q. (BY MR. CICCONE) Colonel, do you ever go</p> <p>11 onto an indoor shooting range?</p> <p>12 A. I have.</p> <p>13 Q. And tell me what kind of hearing protection</p> <p>14 that you wore when you went onto the range.</p> <p>15 A. I wear MAXX earplugs and impact sports</p> <p>16 earmuffs.</p> <p>17 Q. So you wear double hearing protection?</p> <p>18 A. I do.</p> <p>19 I'm a better target shooter with</p> <p>20 double protection.</p> <p>21 Q. And the last topic that I want to talk to</p> <p>22 about is the claim on the packaging that the Shooters</p> <p>23 Earplugs are ideal for shooting sports.</p> <p>24 Colonel, do you know the basis for</p> <p>25 that claim that those earplugs are ideal for shooting</p>

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<p style="text-align: right;">Page 198</p> <p>1 sports?</p> <p>2 MR. GONZALEZ: Objection, form.</p> <p>3 THE WITNESS: I can't go back into the</p> <p>4 minds of the marketers who are writing this. But the</p> <p>5 fact of the matter is if you want the maximum amount</p> <p>6 of protection from a hearing protector, a well-fit</p> <p>7 foam plug is the ideal solution for that.</p> <p>8 Q. Right. And do you agree with me that those</p> <p>9 earplugs, those Shooters Earplugs, they could be</p> <p>10 ideal for shooting sports, if; one, the earplugs fit</p> <p>11 you correctly?</p> <p>12 MR. GONZALEZ: Objection, form.</p> <p>13 THE WITNESS: That's correct.</p> <p>14 Q. (BY MR. CICCONE)And, second, do you agree</p> <p>15 with me that they could be ideal for shooting sports</p> <p>16 if you wear them correctly?</p> <p>17 MR. GONZALEZ: Object to form.</p> <p>18 THE WITNESS: And I would like to add</p> <p>19 to that that this isn't a dichotomous answer. So,</p> <p>20 yes, a well-fit earplug provides the most amount of</p> <p>21 attenuation you can get from an earplug, but there's</p> <p>22 evidence that shows that some degradation of the fit</p> <p>23 still provides pretty good attenuation. Where with</p> <p>24 other kinds of earplugs, it's closer to a dichotomous</p> <p>25 thing. So when you break the seal, you break it a</p>	<p style="text-align: right;">Page 200</p> <p>1 adequate to block my ear canals. I have fairly large</p> <p>2 ear canals.</p> <p>3 But when I really get a good plug up</p> <p>4 my ear canals, I can tell that the sound around me</p> <p>5 goes quiet. That's step two in getting a good fit.</p> <p>6 Q. (BY MR. CICCONE) But the question was,</p> <p>7 Colonel: Would you recommend that somebody with no</p> <p>8 experience wearing the plugs try to fit the plugs</p> <p>9 himself or herself with no instruction from anybody</p> <p>10 like you or some other professional and then go onto</p> <p>11 a shooting range, would you recommend that?</p> <p>12 MR. GONZALEZ: Objection, form.</p> <p>13 THE WITNESS: I think in most cases</p> <p>14 that's highly adequate. I don't need to teach</p> <p>15 everybody how to fit earplugs.</p> <p>16 Q. (BY MR. CICCONE)But we talked earlier about</p> <p>17 the situation that you've described in Chapter 14 of</p> <p>18 the Hearing Conservation Manual where you told me</p> <p>19 that you thought it was potentially dangerous for a</p> <p>20 supervisor to hand a worker earplugs and just tell</p> <p>21 the worker, here, use these around loud noises.</p> <p>22 Stick these in your ears.</p> <p>23 MR. GONZALEZ: Objection, form.</p> <p>24 THE WITNESS: So that takes these</p> <p>25 instructions and any information about that the sound</p>
<p style="text-align: right;">Page 199</p> <p>1 lot.</p> <p>2 With a foam earplug, that's not</p> <p>3 necessarily the case. You may still be getting some</p> <p>4 protection, although, you know, likely not the amount</p> <p>5 you'd get with the proper fit.</p> <p>6 Q. (BY MR. CICCONE)Colonel, would you</p> <p>7 recommend that somebody who has no experience wearing</p> <p>8 earplugs try to fit them with no instruction from</p> <p>9 anybody and then go onto a shooting range?</p> <p>10 MR. GONZALEZ: Objection, form.</p> <p>11 THE WITNESS: I would recommend they</p> <p>12 read the directions.</p> <p>13 Q. (BY MR. CICCONE)Now, are you talking about</p> <p>14 the little side panel of the information?</p> <p>15 A. That's good information, yes.</p> <p>16 Q. Okay. Do you think it's good enough?</p> <p>17 MR. GONZALEZ: Objection, form.</p> <p>18 THE WITNESS: I think that is step</p> <p>19 one. Step two is for them to do that reality check</p> <p>20 of, did sound levels go down when I put these</p> <p>21 earplugs in?</p> <p>22 And, again, that basic skill that we</p> <p>23 talked about earlier when I put my little finger in</p> <p>24 my ears like this, it doesn't diminish the sound</p> <p>25 around me very much because my little finger isn't</p>	<p style="text-align: right;">Page 201</p> <p>1 should be diminished.</p> <p>2 It's just -- you know, the point I was</p> <p>3 making there is handing out like candy and giving no</p> <p>4 information. This package gives information.</p> <p>5 MR. GONZALEZ: For the record, she's</p> <p>6 referencing Exhibit -- the exemplar, which is what</p> <p>7 Exhibit 9 is with the instructions.</p> <p>8 Q. (BY MR. CICCONE) Colonel, we've talked</p> <p>9 about that the Shooters Earplugs could be ideal for</p> <p>10 shooting sports if they fit you, if you wear them</p> <p>11 correctly. And is there also a third element, they</p> <p>12 could be ideal for shooting sports if you wear them</p> <p>13 in connection with an over-the-ear muff?</p> <p>14 MR. GONZALEZ: Objection, form.</p> <p>15 THE WITNESS: I wouldn't say it that</p> <p>16 way. I think they would be ideal whether you wore</p> <p>17 the earmuff or not.</p> <p>18 Q. (BY MR. CICCONE)But when you go onto a</p> <p>19 shooting range, you wear the MAXX Earplugs in</p> <p>20 conjunction with an over-the-ear muff; do you not?</p> <p>21 MR. GONZALEZ: Object to form.</p> <p>22 THE WITNESS: I do. And the reason I</p> <p>23 wear the over-the-ear muff is twofold; one, because</p> <p>24 the greatest amount of attenuation makes me more</p> <p>25 accurate. I don't flinch.</p>

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<p style="text-align: right;">Page 202</p> <p>1 And, secondly, the earmuff that I use</p> <p>2 has an amplifier on it so that I can hear what's</p> <p>3 going on around me.</p> <p>4 Q. (BY MR. CICCONE)Colonel, if the Shooters</p> <p>5 Earplugs don't fit you, do you think they're ideal</p> <p>6 for shooting sports?</p> <p>7 MR. GONZALEZ: Objection, form.</p> <p>8 THE WITNESS: No. If something</p> <p>9 doesn't fit you, it's not going to be ideal. If you</p> <p>10 gave somebody clown shoes to walk around, that would</p> <p>11 not be the ideal thing to walk around in. So no.</p> <p>12 Q. (BY MR. CICCONE)Colonel, if you don't wear</p> <p>13 the Shooters Earplugs correctly, do you believe that</p> <p>14 they're ideal for shooting sports?</p> <p>15 MR. GONZALEZ: Objection to form --</p> <p>16 form.</p> <p>17 THE WITNESS: They are likely your</p> <p>18 best protection. If you're not going to wear a</p> <p>19 hearing protector right, the foam plug is probably</p> <p>20 going to give you at least a little of something that</p> <p>21 might protect you enough where other hearing</p> <p>22 protectors may not.</p> <p>23 Q. (BY MR. CICCONE)They might protect you</p> <p>24 enough. In other words, there's a potential risk</p> <p>25 that they will not?</p>	<p style="text-align: right;">Page 204</p> <p>1 the official supplier, whatever that means.</p> <p>2 A. Yes.</p> <p>3 Q. When you were still with Honeywell,</p> <p>4 Colonel, do you believe that Honeywell was doing</p> <p>5 everything that it could do to minimize the potential</p> <p>6 risk to customers that improperly fitted earplugs</p> <p>7 could potentially expose them to dangerously high</p> <p>8 noise levels?</p> <p>9 MR. GONZALEZ: Objection, form.</p> <p>10 Sidebar.</p> <p>11 THE WITNESS: I believe that Honeywell</p> <p>12 was doing similar levels to what other hearing</p> <p>13 protection companies were doing.</p> <p>14 Q. (BY MR. CICCONE) Do you think that they</p> <p>15 could have done more than what they did?</p> <p>16 MR. GONZALEZ: Objection, form.</p> <p>17 THE WITNESS: Yes.</p> <p>18 Q. (BY MR. CICCONE) Those are all my</p> <p>19 questions. I appreciate your time.</p> <p>20 MR. GONZALEZ: We're going to go off</p> <p>21 the record.</p> <p>22 THE VIDEOGRAPHER: The time now is</p> <p>23 6:19 p.m. We are off the record.</p> <p>24 (Recess from to 6:19 p.m to 6:34 p.m.)</p> <p>25 (Exhibit 26 marked)</p>
<p style="text-align: right;">Page 203</p> <p>1 A. It depends --</p> <p>2 MR. GONZALEZ: Objection, form.</p> <p>3 THE WITNESS: It depends on the fit.</p> <p>4 It depends on the weapon. It depends on how many</p> <p>5 shots you're firing.</p> <p>6 Q. (BY MR. CICCONE)And, Colonel, if you don't</p> <p>7 wear the Shooters Earplugs in conjunction with</p> <p>8 another form of hearing protection, for example, the</p> <p>9 over-the-ear muffs, do you believe that they're still</p> <p>10 ideal for shooting sports?</p> <p>11 MR. GONZALEZ: Objection, form.</p> <p>12 THE WITNESS: The way you stated that</p> <p>13 question, yes.</p> <p>14 Q. (BY MR. CICCONE)Colonel, when you were</p> <p>15 still with Honeywell, you told us that Honeywell</p> <p>16 would not sponsor educational events; for example,</p> <p>17 with the hearing conservation association. Do you</p> <p>18 remember telling me that?</p> <p>19 A. I do.</p> <p>20 Q. But they did sponsor or contribute to the</p> <p>21 USA Shooting Team. Do you remember telling me that?</p> <p>22 MR. GONZALEZ: Objection, form.</p> <p>23 THE WITNESS: I don't know that they</p> <p>24 sponsored them.</p> <p>25 Q. (BY MR. CICCONE)Well, it says that they're</p>	<p style="text-align: right;">Page 205</p> <p>1 MR. GONZALEZ: Back on the record.</p> <p>2 What we're going to do, we're making references to --</p> <p>3 the references that were made over to the Hearing</p> <p>4 Conservation Manual, pages 114 and 121, have been</p> <p>5 marked, along with the cover of the Hearing</p> <p>6 Conservation Manual as Exhibit 26. I've given the</p> <p>7 manual back over plaintiff's counsel.</p> <p>8 THE REPORTER: Okay.</p> <p>9 (Exhibit 27 marked)</p> <p>10 MR. GONZALEZ: And then Exhibit 27 is</p> <p>11 going to be a list of the exhibits that -- not</p> <p>12 necessarily were introduced. I think 14 --</p> <p>13 Mr. Ciccone, 14? 14 was not --</p> <p>14 MR. CICCONE: 14 was not played. It's</p> <p>15 on the flash drive that you have and that you have.</p> <p>16 MR. GONZALEZ: Okay. Well, the other</p> <p>17 exhibits, do you know offhand if they were</p> <p>18 introduced?</p> <p>19 MR. CICCONE: Yes. Well, they are.</p> <p>20 They were all numbered.</p> <p>21 MR. GONZALEZ: All right. To the</p> <p>22 extent they've all been numbered, Exhibit 27 has a</p> <p>23 list, with the exception of what's No. 14 on there</p> <p>24 that was not played. All the other ones have been</p> <p>25 admitted into this case.</p>

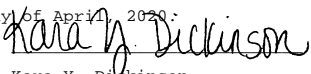
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Page 206		Page 208	
1	We can go back on the video record	1	CHANGES AND SIGNATURE
2	now.	2	WITNESS: THERESA SCHULTZ DEPO DATE: 02/27/2020
3	(Video record resumes at 6:37 p.m.)	3	PAGE LINE CHANGE REASON
4	THE VIDEOGRAPHER: The time now is	4	
5	6:37 p.m. We are back on the record.	5	
6	EXAMINATION	6	
7	Q. (BY MR. GONZALEZ) Dr. Schultz, my name is	7	
8	Javier Gonzalez. You understand I represent	8	
9	Honeywell Safety Products in this lawsuit that	9	
10	Roberto Flores has filed against my client?	10	
11	A. Yes, sir.	11	
12	MR. GONZALEZ: We're going to reserve	12	
13	our questions until the time of trial at this time.	13	
14	Thank you, Dr. Schultz, on behalf of	14	
15	my client and myself.	15	
16	We're done.	16	
17	EXAMINATION	17	
18	Q. (BY MR. CICCONE) Colonel, I forgot to ask	18	
19	you, are you being paid for your time to appear here?	19	
20	MR. GONZALEZ: Object to form.	20	
21	THE WITNESS: No, sir.	21	
22	Q. (BY MR. CICCONE) Doing this voluntarily?	22	
23	A. Yes, sir.	23	
24	MR. CICCONE: Thank you, ma'am.	24	THERESA SCHULTZ
25	Those are all my questions.	25	
Page 207		Page 209	
1	MR. GONZALEZ: We'll reserve all of	1	SIGNATURE OF WITNESS
2	our questions for the time of trial. Thank you.	2	
3	THE VIDEOGRAPHER: The time now is	3	I, THERESA SCHULTZ, solemnly swear or
4	6:38 p.m. We are off the record.	4	affirm under the pains and penalties of perjury that
5	(Deposition concluded at 6:38 p.m.)	5	the foregoing pages contain a true and correct
6		6	transcript of the testimony given by me at the time
7		7	and place stated, with the corrections, if any, and
8		8	the reasons therefor noted on the foregoing
9		9	correction page(s).
10		10	
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14		14	THERESA SCHULTZ
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<p>1 REPORTER'S CERTIFICATE Page 210</p> <p>2 I, KARA Y. DICKINSON, Shorthand Reporter</p> <p>3 certify:</p> <p>4 That the foregoing proceedings were taken before</p> <p>5 me at the time and place therein set forth, at which</p> <p>6 time the witness was put under oath by me;</p> <p>7 That the testimony of the witness, the questions</p> <p>8 propounded, and all objections and statements made at</p> <p>9 the time of the examination were recorded</p> <p>10 stenographically by me and were thereafter</p> <p>11 transcribed;</p> <p>12 That a review of the transcript by the deponent</p> <p>13 was requested;</p> <p>14 That the foregoing is a true and correct</p> <p>15 transcript of my shorthand notes so taken.</p> <p>16 I further certify that I am not a relative or</p> <p>17 employee of any attorney of the parties, nor</p> <p>18 financially interested in the action.</p> <p>19 I declare under penalty of perjury under the</p> <p>20 Federal laws that the foregoing is true and correct.</p> <p>21 Dated this 21st day of April, 2020.</p> <p>22 </p> <p>23 Kara Y. Dickinson</p> <p>24 Notary No. 564162-9</p> <p>25 Firm Registration No. 341</p> <p>U.S. Legal Support, Inc.</p> <p>4801 NW Loop 410, Suite 375</p> <p>San Antonio, Texas 78229</p> <p>(210)734-7127</p>	

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